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ABSTRACT

Because migration trends in the West and their consequences have sometimes served as indicators of what other regions can expect, it is important that such trends and effects be monitored and analyzed. This bulletin describes patterns of migration, assesses individual and family and social considerations in western migration, and discusses policy implications. Projective Markov modeling gives predictions of future population movements among the western states based on the assumption of stable transition percentages. Location preference studies focus on community aesthetic qualities and their associations with community size. Studies of actual migration behavior show that economic and family considerations influence migration and that migration is selective of the young, the more highly educated, and those in higher paying occupations. Social consequences of western migration are addressed from cost-benefit and community satisfaction perspectives. Substantive mechanisms that can influence migration include incentives and inducements, regulation, information dissemination, expenditures and siting decisions, enabling actions, and coordination and organization. Thirty-four tables show migration data including western region and subregion migration by wage change, sex, age, and industry from 1960 to 1965 and from 1965 to 1970; reasons for migration; and key social costs/benefits of community growth and decline. Graphs show scale effect and migration effect curves for 11 western states. (NEC)

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THE SOCIAL AND ECONOMIC SIGNIFICANCE OF HUMAN MIGRATION IN THE PACIFIC NORTHWEST

Washington State University

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FOREWORD

This bulletin is the final report of Western Regional Research Project W-118, *The Economic and Social Significance of Human Migration for the Western Region.* This report does not attempt to present in detail all of the findings of the component state research projects. Rather, the intent is to show how the various subprojects done under W-118 relate to migration, population distribution, and rural development in general. Readers who want more detail can get the subproject research reports from appropriate agricultural experiment stations or from individual authors.

COOPERATING AGENCIES

The agencies cooperating in this work are the agricultural experiment stations of Arizona, California, Colorado, Hawaii, Idaho, Indiana, Montana, Nevada, Oregon, Utah, and Washington; and the United States Department of Agriculture Science and Education Administration.

Under the procedure of cooperative publications, this regional bulletin becomes in effect an identical publication of each of the cooperating agencies, and is mailed under the frank and indicia of each. Supplies of this publication are available at the sources listed above.

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ABOUT THIS BULLETIN

This bulletin is a summary report of findings and interpretations of the coordinated research of the agricultural experiment stations' regional technical committee W-118. With the assistance of the W-118 committee, the report was compiled by Edward Knop, Colorado State University; Joel Hamilton, University of Idaho; Donald West, Washington State University; and C. Jack Gilchrist, Montana State University. The compilers appreciate the careful review, helpful comment, and generous support in the preparation of the manuscript provided by Ralph A. Loomis, agricultural economist at Washington State University.

SUMMARY AND CONCLUSIONS

Migration Patterns

The information on population movements reflected in the Census of Population has been supplemented in two ways—by the Markov modeling procedures of Salkin, Lianos, and Paris, and by the use of the Social Security Continuous Work History Sample (CWHS).

The projective technique of Markov modeling gives predictions of future population movements among the Western states based on the assumption of stable transition percentages. Gilchrist's work calls some of these results to question, since he found a slackening of net migration into the Western Region, led by a shift to actual net out-migration from California-Hawaii Subregion.

Some initial evidence on personal characteristics of migrants within the Western Region was also provided in Gilchrist's work. His results showed proportions of in-migrants and out-migrants among salaried workers covered by OASDHI in 13 western states during the 1960-65 and 1965-70 time periods. About 13% of the covered workers migrated into the state where they worked during these periods, while about 10% left the state. Among the migrants, males outnumbered females by a ratio of roughly 4 to 1, a characteristic undoubtedly caused by the nature of the sample, covered employees, rather than the region's population. The age distribution of the migrants was consistent with that found in many other studies. Geographic mobility was most common among young adults, particularly those aged 25-34 years.

Two other personal characteristics of migrants revealed in Gilchrist's studies are related to their employment. The major industries in which migrants were employed were mining, manufacturing, trade, and service. Agriculture apparently was less important, but its magnitude was vastly understated because self-employed workers were not included in the sample. The other work-related characteristic was wage level. The distribtution of migrants across wage categories ranging from "less than $1,000" to "more than $10,000" was fairly uniform. The numbers of migrants were slightly larger in the middle earnings categories.

The location preference studies focused mainly on services and aesthetic qualities of communities and their association with community size. A majority of respondents preferred places with populations of less than 150,000. However, a large proportion also expressed satisfaction with locations where they were residing. This latter finding suggests that preferences are influenced by experience and acceptance of surroundings. In situations where dissatisfaction with the comunity appears sufficient to cause migration, and where economic and family considerations are not overriding, the preference studies imply that population shifts would be distributed toward medium-sized towns and small cities.

The studies of actual migration behavior show that economic and family considerations do much to explain why people migrate. Empirical results corroborate much other evidence that migration is selective of the young, the more highly educated, and those in higher paying occupations. Studies using primary data collected since 1970 reveal that family and environmental considerations are also quite influential. Limited evidence suggests that expectations from migration are generally fulfilled and that economic and family-related gains are realized from geographic mobility.

Social Consequences

We addressed the social consequences of Western migration, when possible, from a cost-benefit perspective. Studies at the Idaho Experiment Station focused on an empirical documentation of the economies of size relationship (implying that in-migration confers a benefit of reduced per capita costs of goods and services), and on the empirical estimation of the function relating community size to offering of goods and services (implying an in-migration benefit of greater access to goods and services).

Research at the Colorado Station concentrated more on the relation between migration and the social participation —community satisfaction variables. The rate of population growth was related directly to citizen interest in community affairs. An inverse relation was discovered between expressed community satisfaction and perceived severity of community problems. We concluded that the quality of community social life is probably more important to residents than employment opportunities and pay scales. In many cases, a community may be strongly affected by sharp growth (Rock Springs is an example); but as successful coping strategies are developed, the overall long-run impact may be more positive than previously assumed.

THE SOCIAL AND ECONOMIC SIGNIFICANCE OF HUMAN MIGRATION IN THE WESTERN REGION

I. PATTERNS OF MIGRATION IN THE WESTERN UNITED STATES

Migration and its accompaniments have always been a dominant dimension in the national saga. These accompaniments include: exploration and expansion; and optimism that with effort, understanding, and a portion of good fortune, the blending of peoples with their traditions and activities would produce the good life. Underlying all, of course, was the belief that voluntary and rational pursuit of opportunities in the land would yield success for those willing to risk uncertainty and sacrifice for a more prosperous tomorrow. Those opportunities and that tomorrow usually seemed to lie elsewhere. The opportunities first brought people to these shores, then sent them or their descendents westward, and finally urbanward, all in mass movement proportions.

To the extent that the U.S. has dominat value-themes, they are keyed to our migratory history: central to all is guaranteed free movement—both geographical and social. Such themes justify hope, ambition, self-assertion, autonomy, and deferred gratification on which our national experience rests. But the matter has not been one of personal psychology and independent behavior alone. Migration largely came from and was supported and influenced by societal interests and was embraced as public policy either formally or informally.

In the case of Western migration, there was a national desire to develop resources of the region; to have available exposure to natural and ethnic uniquenesses of the region, and to keep alive the opportunity-effort value theme of our emerging culture. The policy mechanisms were many and varied: constitutional guarantees of mobility, free land, secured routes of passage, exploration and mapping, and treaties and military actions to reduce the risks of frontier settlement. Lines of communication were developed so that separated people could maintain social integration and identity. Both the objectives and the means are still with us, of course, for their precedent provides our society's foundation.

Conversely, gross migration patterns and their social, economic, and political implications have been thought to underlie other major problems that we have historically confronted. Past and present urban problems have resulted, we assume, from masses of unprepared in-migrants. Recurrent problems in racial, ethnic and religious group relations are assumed rooted in previous migration patterns, reflecting public policy or the lack thereof.

Area income distribution and service availability are often thought a consequence of accumulated selective migration from rural areas of the East or South. While the list goes on, the important point is that because so many of our national problems are thought related to migration, policy solutions often are migration-oriented. Various restrictions, incentives and propagated values, once intended to influence migration in ways that would relieve other societal problems, are now migration policy precedents that we must take into account.

We simply point out that unique features of U.S. historical and present circumstances are integrally keyed to migratory precedent. These features include our large area, our relatively low population density, and our heterogeneity in heritages. Involved also is our acceptance of uncertainty and change. Each feature derives, in part, from our migration experience.

The West provides us with our clearest and most recent example of the reciprocity between migration, personal aspirations, and public policy. The hundred-plus years of Western settlement and development reflect migration patterns and their consequences. Temporal preoccupations with opportunities for a richer, quieter, freer, or more exciting personal life added up to yield mass movements, both geographic and social. The California, Nevada, Colorado, and Alaska gold and silver rushes; the Mormon mass migration and gradual dispersion; the dust-bowl depression refugee movement; and the lure of the southwestern climate and culture coupled with retirement migration have affected the West so significantly as to become its history, and its present.

Because of the timing of flows, selectivity differences in personal characteristics, and variations in natural resources, the West has been made into a region of sociocultural and natural subregions. Yet many common experiences bind the West together, again largely matters of similar migration histories and problems associated with these. The West has also been directly and variously affected by federal standards and policies. Accordingly, the West has experienced a greater "uniform management" of migration and related matters in recent years. The results include both unique opportunities and problems shared by the region as a whole.

Census Data Overview

To show the context for a review and assessment of W-118 component projects, we review some of the more recent migration experiences of the West, beginning with selective notation of U.S. Census of Population data. As table 1 shows, the entire nation increased in population by 13.3% between 1960 and 1970. Most of this gain was due to natural increase (births minus deaths) rather than immigration. During the same period, the U.S. urban population increased by 19.2% to become 73.5% of the national population. Meanwhile, the rural population declined by 0.3% (mostly because of net rural out-migration).

In the Western Census Region (Montana through New Mexico and all states to the West), the increase in total population during the 1960 to 1970 period was 24.1%—nearly twice the national average. In the West, urban places grew by 37.4%, while rural areas lost 5.1% of their people, both changes were due mainly to internal migration.

The Pacific Census Subregion (all states bordering the Pacific Ocean) showed a 25.1% increase, while states in the Rocky Mountain Subregion made a 20.8% gain in population. The urban population in the Pacific Subregion grew by 32.7% to become 86.0% of that subregion's population

while the rural population decreased by 7.2%. In the Mountain Subregion, urban places gained by 31.6% to form 73.1% of the subregion's residents, while the rural areas lost 1.2% of their population.

Like the nation, then, the Western Region and its subregions gained in total population, but had fewer people living in rural areas during the 1960s. All Western States gained some population during the decade, but differed in the amounts of their increases (table 1). The states also differed in both the amount and direction of nonurban population change.

More specifically, those states showing sizable percentage gains in population include Nevada, Arizona, Alaska, California, Colorado, Hawaii, Washington, Utah, and Oregon. The small Nevada and Alaska population bases in 1960 enabled dramatic percentage increases during the decade. The other heavy gainers had substantial base populations, suggesting that a combination of aesthetic attractiveness and economic activity pulled great numbers of in-migrants across their borders. Western states showing more modest 1960 and 1970 gains include Wyoming, Montana, Idaho, and New Mexico.

Table 1 shows rural population losses in California, Hawaii, Wyoming, Utah, Idaho, New Mexico, and Montana. Not all of these losses of rural population were due to people's moving from rural to urban areas. In some cases, areas classified as rural in 1960 gained enough population to be reclassified as urban in 1970. In the 1960s, the rural population increased in Nevada, Alaska, Arizona, Oregon, Colorado, and Washington. Most of these rural population gains represent increases in rural nonfarm residents.

More detailed examinations of these population shifts were made in two ways:

1. Modeling techniques were used to extrapolate population trends.
2. Supplementary data such as the Social Security Continuous Work History Sample were used to document and examine the population flows.

Projective Models of Western Population Shifts

Projective techniques like Markov modeling enable the analysis of historic data in dynamic fashion, yielding extrapolations of population numbers and trends. In their W-118 research effort, Markov projective modeling of decennial census data was done by Salkin, Lianos, and Paris (65). Selected data from their Western states analysis are in tables 2 and 3. Table 2 summarizes their findings under alternative assumptions. Table 3 shows the empirical probabilities of having remained in the same state of residence, having moved to or from another Western state, or having moved to or from the Western Region between 1965 and 1970.

The Markov modeling process assumes that the historic pattern of population movements, as represented by these transition probabilities, will describe future population shifts as well as past ones. Because the technique is essentially projective, the results can be invalidated by any new factor (preference shift, incentive shift, or policy change) that causes people to move in new ways—implying altered transition probabilities.

The authors summarize their multifaceted study with the comments: "The present application of Markov chains in the analysis of population movements in the Western

Table 1. Summary of population changes, 1960 to 1970

Area	Total 1970 population	% Rural 1970	% Population change 1960-70[1] Total	Rural	Urban
United States	203,211,926	26.5	+13.3	- .3	+19.2
Western Region	34,804,193	17.1	+24.1	- 5.1	+32.4
Mountain Subregion	8,281,562	26.9	+20.8	- 1.2	+31.6
Pacific Subregion	26,281,562	14.2	+25.1	- 7.2	+32.7
Alaska	300,382	51.6	+32.8	+10.3	+69.7
Arizona	1,770,900	20.4	+36.0	+ 9.2	+45.2
California	19,953,134	9.1	+27.0	-15.3	+33.6
Colorado	2,207,259	21.5	+25.8	+ 2.8	+34.1
Hawaii	768,561	16.9	+21.5	-12.7	+32.0
Idaho	712,567	45.9	+ 6.8	- 6.6	+21.6
Montana	694,409	46.6	+ 2.9	- 3.7	+ 9.5
Nevada	488,738	19.1	+71.3	+10.4	+97.0
New Mexico	1,016,000	30.2	+ 6.8	- 5.3	+13.1
Oregon	2,091,385	32.9	+18.2	+ 3.0	+27.5
Utah	1,059,273	19.6	+18.9	- 7.0	+27.6
Washington	3,409,169	27.4	+19.5	+ 2.5	+27.4
Wyoming	332,416	39.5	+ .7	- 7.9	+ 7.2

[1]Includes both natural increase and immigration.

Source: 1970 census of population, characteristics of the population (vol. 1), number of inhabitants (part A), sections 1 and 2. May, 1972. U. S. Dept. Commerce, Bur. of Census, Washington, D. C.

Table 2. State population 1960-1970, and predictions, 1970 and 1980 (thousands)

State	Census population 1960	Census population 1970	Population adjusted for natural growth 1970	Predicted population without growth 1970	Predicted population without growth 1980	Predicted population with growth (I) 1980	Predicted population with growth (II) 1980	Predicted population by bureau of census 1980	Long-run equilibrium population without growth
Montana	675	694	610	635	624	698	718	741	612
Idaho	667	713	626	590	706	790	805	783	927
Wyoming	330	332	292	572	311	348	355	352	299
Colorado	1,754	2,207	1,939	1,889	2,369	2,653	2,714	2,708	2,739
New Mexico	951	1,016	893	1,039	906	1,014	1,049	1,124	813
Arizona	1,302	1,772	1,557	1,801	2,001	2,240	2,285	2,228	2,570
Utah	891	1,059	930	910	1,014	1,135	1,176	1,275	1,135
Nevada	285	489	430	322	494	553	582	693	622
Washington	2,853	3,409	2,994	2,936	4,087	4,577	4,605	4,061	7,265
Oregon	1,769	2,091	1,837	1,778	2,369	2,652	2,685	2,482	3,979
California	15,721	19,953	17,522	18,889	21,455	24,030	24,628	24,865	28,020
Rest of US	151,269	169,498	148,844	147,079	166,855	186,881	191,315	191,654	154,260
Total	178,467	203,233	178,474	178,440	203,191	227,571	232,917	232,966	203,236

Table 3. 1965-1970 interstate transition matrix

	Mont.	Idaho	Wyo.	Colo.	New Mex.	Ariz.	Utah	Nevada	Wash.	Oregon	Calif.	Rest of U.S.
Montana	.8487	.0087	.0050	.0071	.0016	.0049	.0029	.0016	.0311	.0084	.0211	.0585
Idaho	.0055	.8469	.0021	.0044	.0014	.0042	.0187	.0035	.0346	.0191	.0225	.0366
Wyoming	.0120	.0056	.7974	.0359	.0034	.0078	.0098	.0027	.0113	.0050	.0253	.0832
Colorado	.0017	.0012	.0035	.8583	.0049	.0069	.0033	.0016	.0056	.0028	.0272	.0826
New Mexico	.0009	.0010	.0016	.0136	.8150	.0133	.0026	.0023	.0036	.0017	.0351	.1090
Arizona	.0006	.0012	.0006	.0082	.0056	.8489	.0031	.0032	.0050	.0034	.0519	.0705
Utah	.0019	.0098	.0030	.0082	.0022	.0074	.8779	.0062	.0088	.0033	.0325	.0384
Nevada	.0024	.0076	.0014	.0062	.0047	.0117	.0133	.7688	.0129	.0093	.0842	.0770
Washington	.0024	.0044	.0003	.0020	.0006	.0022	.0012	.0008	.9113	.0138	.0233	.0372
Oregon	.0015	.0049	.0004	.0019	.0006	.0027	.0011	.0016	.0300	.8965	.0289	.0294
California	.0006	.0011	.0002	.0025	.0009	.0037	.0016	.0024	.0064	.0056	.9247	.0499
Rest of US	.0002	.0002	.0002	.0015	.0005	.0013	.0002	.0002	.0015	.0006	.0095	.9840

Region has resulted in two main conclusions. First, as shown in the 'stayer' probabilities and the average number of years of residence in each state (data not included here), mobility of population among states over the years has increased for all Western states . . . Second, Arizona, Colorado, and the Pacific Coast will gain population due to both natural increase and population movements. The rest of the United States will lose population due to net outmigration toward the West, but the natural increase is predicted to be large enough so that all states will be more populous in 1980" (65:22-23).

Continuous Work History Sample Analysis

A major need at the outset was obtaining comparable migration information by state units. Particularly, we needed data that detailed Western migratory subpopulation characteristics more completely and more often than the U.S. Census of Population does. Under the persistent leadership and coordination of C. Jack Gilchrist, a common effort was organized to obtain and analyze Social Security Continuous Work History Sample (CWHS) data for the Western Region. This enabled tracing a 1% sample of the OASDI-covered-Western work force through a 10-year period. This procedure disclosed demographic and economic characteristics of regional migratory and nonmigratory subpopulations not available from Census sources.

Because this activtiy was central to the committee's activities, and because it yielded much comparative data of general interest that is not available elsewhere, more attention will be given here to this work than to any other single activity. In addition to this bulletin, various other state and regional materials have been published. They report the findings of more specialized analyses and methodological details (note particularly references 32, 36, 41).

Because all analysis here is on the covered labor force that was employed during the 1960-65 or 1965-70 periods or both, data do not correspond precisely with migrant and stationary subpopulation numbers and characteristics published by the Census Bureau. Census data contain a substantial proportion of youth, self-employed persons not covered by social security, and unemployed people. The CWHS data are superior for characterizing the economically active segments of the population, who most directly affect and are affected by migration-related conditions.

Further, a major advantage of the CWHS data source over census information is that one can trace the destinations of migrants, as well as their origins if we realize that "origin" and "destination" refer to place of employment rather than place of residence (31).

The user of CWHS data also should keep in mind the implications of the smallness of the 1% sample. The number of observations for a restricted subsample can get extremely small—making the CWHS unreliable for looking at the characteristics of small subsamples such as counties or specific age groupings for a given state.

Migration patterns of Western "covered" population

Sex and migration status

Estimates from the sample show about 5½ million people covered by the Social Security system and employed in both 1960 and 1965 in the region. More people moved into the region than out of it. The data describing Western Region employed persons for the periods 1960-65 and 1965-70 are in table 4. During the first part of this period, about 84% of these people were not migrants, here simply called "residents" of the region. This figure dropped slightly during 1965-70. In addition, the ratio of in-migrants to out-migrants was less in 1965-70 than in 1960-65. Thus in both periods the CWHS sample showed net in-migration to the Western Region, but the net flow was slower in 1965-70 than in the previous 5 years.

Table 5 shows, as expected, that more males were employed than females. This tendency was greater among migrants than residents, and out-migrants were more likely to be male than were in-migrants. However, the character of the in-migrant flow from 1960-65 to 1965-70 changed slightly in its sex composition.

Age and migration status

Tables 6 and 7 provide information about the relation between age and migration status. In table 6, it becomes apparent that the chances of being a resident are quite different among age groups. Furthermore, the distribution of migration status by age group shows some interesting changes as one compares 1960-65 with 1965-70. The most mobile age group was the 25-29 year grouping. This group shifted from a net in-migration rate of 12% in 1960-65 to only 7% net in-migration in 1965-70. The most dramatic shift between the two periods was in the age cohort 30-39. This group moved from a preponderance of in-migrants in the first period to a stand-off in the second period. The trend toward less net in-migration from 1960-65 to 1965-70 extended quite uniformly across all age groupings.

Table 4. Western Region migration by sex 1960-65 and 1965-70

Sex	Resident	In-migrant	Out-migrant
	----------Percentage----------		
1960-65			
Male	84	9	5
Female	85	9	4
1965-70			
Male	82	8	8
Female	85	8	6

Table 5. Sex by Western Region migration 1960-65 and 1965-70

Migration status	male	female
	-----Percentage-------	
1960-65		
Res	69	30
In	71	28
Out	74	25
1965-70		
Res	67	32
In	68	31
Out	75	24

Table 6. Western Region migration by age 1960-65 and 1965-70, in percentages

	Migration status								
	1960-1965				1965-1970				
Age	Res	In	Out	Net in	Res	In	Out	Net in	Shift of net in
	----------Percentage----------								
21 & less	85	11	3	8	84	9	5	4	-4
22-24	76	17	5	12	76	15	8	7	-5
25-29	75	16	8	8	75	14	10	4	-4
30-34	78	13	8	5	77	11	11	0	-5
35-39	81	11	6	5	80	9	9	0	-5
40-44	85	8	5	3	83	7	8	-1	-4
45-49	87	8	4	4	86	6	6	0	-4
50-54	89	6	3	3	88	5	6	-1	-4
55-59	91	5	2	3	90	4	5	-1	-4
60 & over	93	4	2	2	92	3	4	-1	-3

Table 7 shows the relationship between these shifts in net migration and age. The primary shift between the periods was for the in-migrant category. In-migrants were even more likely to be in the 25-29 year age cohort in 1965-70 than in 1960-65.

Industry of employment and migration status

Tables 8 and 9 show how the decrease in net immigration during 1965-70 was spread across industries. A large part of the increase in out-migration was by mining and manufacturing employees. The number of out-migrants

Table 7. Age by Western Region migration 1960-1965 and 1965-1970

Migration status	Age									
	21 & less	22-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60 & over
	Percentage									
1960-65										
Res	1	3	9	11	13	14	13	12	10	11
In	1	6	18	17	15	12	11	7	5	4
Out	1	4	16	17	16	15	10	8	5	4
1965-70										
Res	1	4	11	11	11	12	13	12	10	11
In	1	7	21	17	13	11	10	7	5	4
Out	1	4	16	17	14	14	11	9	6	5

Table 8. Western Region migration by industry 1960-1965 and 1965-1970

Industry	Migration status								
	1960-1965				1965-1970				
	Res	In	Out	Net in	Res	In	Out	Net in	Shift of net in
	Percentage								
Agr., For. & Fish	86	9	4	5	87	7	4	3	-2
Mining	81	10	8	2	77	9	12	-3	-5
Contract const.	85	8	5	3	84	7	7	0	-3
Manufacturing	83	10	5	5	79	8	12	-4	-9
Trans, Public ut.	85	7	6	1	86	7	6	1	0
Trade	85	9	5	4	84	8	6	2	-2
Fin, Ins, R.e.	83	10	5	5	84	9	5	4	-1
Service	83	10	5	5	84	9	6	3	-2
Government	90	5	4	1	91	4	3	1	0

Table 9. Industry by Western Region migration 1960-1965 and 1965-1970

Migration	Industry								
	Agr. For. Fish	Mining	Contract const.	Manufacture	Transport Public u.	Trade	Fin. Ins. Real e.	Service	Govt.
	Percentage								
1960-1965									
Res	0	1	8	28	8	23	5	19	4
In	0	1	7	31	6	23	6	21	2
Out	0	2	8	27	9	22	5	20	3
1965-1970									
Res	0	1	6	26	8	22	5	21	6
In	0	1	6	28	7	22	6	23	3
Out	0	2	6	42	6	18	4	17	2

from manufacturing more than doubled between the two periods. Since manufacturing employs many more people than mining, one would expect more migrants in manufacturing, assuming workers in both industries are similarly motivated to migrate.

Wage level and migration status

Several studies in recent years have shown that migration is a selective process, with wage improvement inducing migration. If so, one would expect to see evidence of this in the distribtution of wage level and wage change by migration status. The summaries in tables 10-13 provide some information on this relationship.

Tables 10 and 11 show that workers earning more than $14,000 contributed significantly to the change in out-migrant flow. The out-migrant percentages for the $14,000-$16,000 and $16,000-$18,000 categories in 1965-70 were double those for 1960-65, and the change in the $18,000 and over category was 33%. Other wage levels also contributed to the out-migration increase, but not as dramatically. In 1965-70, more migrants received higher wages than residents than was the case in the first period (table 11). Migrants were more heavily represented in income brackets of $14,000 and above and less well represented in the under-$4,000 bracket than in the first period.

Wage change and migration status

Wage changes by migration status for the Western Region are in tables 12 and 13. In both periods, those receiving a wage increase of $3,000 or above were more likely to be migrants than those in the other wage change categories.

Table 13 shows that wages tended to improve over time in all groupings by migration status. For both periods, though, migrants are more likely to be found at either end of the wage change set than are residents. It may be that migration entails monetary risks as well as rewards. Or possibly the data simply reflect different reasons for migrating, and thus different implications for wage change.

Migration in Western Subregions

To identify migration flows within the Western Region, we delineated subregions within the Western Region. These subregions were chosen on the basis of geographic proximity and economic similarity. The five subregions were:

1. the Northwest Pacific Subregion—Oregon, Washington, and Alaska
2. the Southwest Pacific Subregion—California and Hawaii
3. the Northern Mountain Subregion—Idaho, Montana, and Wyoming

Table 10. Western Region migration by wage level 1960-1965 and 1965-1970

	Migration Status							
	1960-1965				1965-1970			
Wage level, $	Res	In	Out	Net in	Res	In	Out	Net in	Shift of net in
	Percentage								
Under 4,000	81	10	7	3	81	10	8	2	-1
4,000-6,000	85	9	4	5	83	9	7	2	-3
6,000-8,000	87	8	3	5	85	7	6	1	-4
8,000-10,000	87	8	4	4	85	6	7	-1	-5
10,000-12,000	85	8	5	3	85	6	7	-1	-4
12,000-14,000	82	10	6	4	84	7	8	-1	-5
14,000-16,000	82	12	5	7	80	9	10	-1	-8
16,000-18,000	83	10	6	4	77	9	12	-3	-7
18,000 & more	78	12	9	3	76	11	12	-1	-4

Table 11. Wage level by Western Region migration status 1960-1965 and 1965-1970

	Wages, dollars								
Migration status	Under 4,000	4,000-6,000	6,000-8,000	8,000-10,000	10,000-12,000	12,000-14,000	14,000-16,000	16,000-18,000	18,000 & more
	Percentage								
1960-1965									
Res	28	24	22	11	5	2	1	0	1
In	32	25	19	10	5	2	1	0	2
Out	39	20	15	9	6	3	1	0	3
1965-1970									
Res	19	16	19	16	11	6	3	2	4
In	24	18	17	12	8	5	4	2	6
Out	20	15	16	15	10	6	4	3	6

Table 12. Western Region migration by wage change 1960-1965 and 1965-1970

Wage change, $	Migration Status 1960-1965 Res	In	Out	Net in	1965-1970 Res	In	Out	Net in	Shift of net in
	Percentage								
Decrease	83	9	7	2	82	8	8	0	-2
Increase									
up to 1,000	88	7	3	4	86	6	6	0	-4
1,000-3,000	85	9	4	5	86	6	6	0	-5
3,000-6,000	80	13	6	7	81	9	8	1	-6
Over 6,000	77	14	7	7	76	12	11	1	-6

Table 13. Wage change by Western Region migration 1960-1965 and 1965-1970

Migration status	$ Wage decrease	$ Wage Increase Up to 1,000	1,000-3,000	3,000-6,000	Over 6,000
	Percentage				
1960-1965					
Res	27	24	30	13	3
In	28	17	29	19	5
Out	36	16	25	16	5
1965-1970					
Res	19	14	32	23	10
In	21	10	24	26	17
Out	21	11	24	25	16

4. the Southern Mountain Subregion—New Mexico, Arizona, and Nevada
5. the Central Mountain Subregion—Utah and Colorado.

The CWHS definition of migrant for this subregion analysis is a person who was employed in a different subregion at the end of a period of interest from the one he was in at the beginning of that period. By definition, then, some of the persons considered residents in the Western Region analysis made a move within the region and were considered migrants in the subregion analyses.

Sex and migration status

Table 14 shows some considerable differences in rates of mobility among the subregions during 1960-65. The Northwest and Southwest Pacific Subregions had fewer migrants proportionately than the other subregions. In addition, the ratio of in-migrants to out-migrants varied among the subregions. The Southwest Pacific Subregion had a larger proportion of in-migrants to out-migrants and more net in-migration than any other subregion during 1960-65. This net flow into California and Hawaii reversed by 1965-70. The only subregion with substantially more out-migrants than in-migrants in both periods was the Northern Mountain Subregion.

The change between 1960-65 and 1965-70 from a net in-migrant flow to a net out-migrant flow of males in the Southwest Pacific Subregion is important. The other subregions showed only minor differences between the two 5-year periods. California and Hawaii accounted for most of the shift to net out-migrant flows.

All subregions tended toward more migration during the 1965-70 period than in 1960-65 for both sexes and all three residence categories (table 15). One of the more notable internal shifts between the periods occurred in Idaho, Montana, and Wyoming. This is the only subregion in which the proportions of male and female migrants shifted substantially. The out-migrant stream had a higher proportion of males and the in-migrant stream had more females in 1965-70 than in 1960-65.

Table 14. Migration status by sex for subregions of the Western Region, 1960-1965 and 1965-1970

Sex	N.W. Pacific Res	In	Out	Net in	S. W. Pacific Res	In	Out	Net in	N. Mountain Res	In	Out	Net in	S. Mountain Res	In	Out	Net in	C. Mountain Res	In	Out	Net in
	Percentage																			
1960-1965																				
Male	79	10	9	1	78	13	7	6	65	15	19	-4	60	21	18	3	67	16	15	1
Female	82	9	8	1	81	12	6	6	77	9	13	-4	63	21	14	7	70	15	13	2
1965-1970																				
Male	75	13	10	3	77	10	12	-2	67	13	18	-5	59	22	18	4	67	16	16	0
Female	81	10	7	3	81	10	8	2	77	10	12	-2	66	20	12	8	70	14	14	0

Age and migration status

Table 16 shows present migration status by age, and table 17 has age by migration status for workers covered by social security.

For the period 1960-65, as expected, younger people were more likely to move than older ones. Even the age groups 40 and above show subregional differences similar to those found with sex. Arizona, New Mexico, and Nevada are especially interesting in this regard in that they had proportionately more migration in the two older categories than any other subregion. This likely reflects the desirability of those states as retirement areas. However, most of the other age categories of this subregion were also more mobile.

The Northern Mountain Subregion had more out-migration than in-migration (table 14). This was true for almost all ages, although it was most pronounced for the 22-39 year olds (table 16).

The differences between 1960-65 and 1965-70 noted before for sex were also found for age in the Southwest Pacific Subregion (table 17). All age cohorts except those under 34 years old changed from net in-migration to net out-migration.

Table 15. Sex by migration status for subregions of the Western Region 1960-1965 and 1965-1970

Migration status	N. W. Pacific		S. W. Pacific		N. Mountain		S. Mountain		C. Mountain	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
	Percentage									
1960-1965										
Res	68	31	69	30	66	33	70	29	70	29
In	72	27	71	28	79	20	71	28	73	26
Out	71	28	74	25	76	23	76	23	73	26
1965-1970										
Res	65	34	66	33	64	35	66	33	68	31
In	72	27	69	30	73	26	71	28	71	28
Out	73	26	74	24	76	23	76	23	71	28

Table 16. Migration status by age for subregions of the Western Region 1960-1965 and 1965-70

Age	N. W. Pacific				S.W. Pacific				N. Mountain				S. Mountain				C. Mountain			
	Res	In	Out	Net in	Res	In	Out	Net in	Res	In	Out	Net in	Res	In	Out	Net in	Res	In	Out	Net in
	Percentage																			
1960-1965																				
21 or less	63	26	9	17	74	19	6	13	76	9	14	-5	58	12	28	-16	64	22	12	10
22-24	72	14	13	1	69	23	6	17	55	13	31	-18	53	23	22	1	60	23	16	7
25-29	67	17	15	2	66	22	10	12	49	23	27	-4	50	28	21	7	56	21	22	9
30-34	71	16	12	4	70	18	10	8	60	18	21	-3	50	27	21	6	59	20	19	1
35-39	74	13	11	2	76	15	8	7	61	15	23	-8	57	22	20	2	62	19	17	2
40-44	80	10	8	2	79	11	8	3	68	14	17	-3	63	20	15	5	69	15	15	0
45-49	85	7	7	0	83	10	6	4	73	11	15	-4	65	21	12	9	70	15	13	2
50-54	86	6	7	-1	85	9	5	4	78	8	12	-4	68	16	15	1	79	11	9	2
55-59	89	5	5	0	87	7	4	3	81	9	9	0	67	18	14	4	80	10	9	1
60 & more	91	4	4	0	90	5	3	2	85	6	8	-2	75	12	11	1	84	9	6	3
1965-1970																				
21 or less	73	13	13	0	81	14	4	10	87	0	12	12	72	9	18	-9	75	14	10	4
22-24	64	23	12	11	71	18	10	8	55	14	30	-16	50	27	21	6	57	20	22	-2
25-29	62	21	15	6	68	17	13	4	49	23	26	-3	46	29	23	6	56	23	19	4
30-34	67	18	14	4	70	14	14	0	55	18	26	-8	53	27	19	8	56	21	22	-1
35-39	73	14	11	3	74	11	13	-2	64	16	18	-2	57	24	18	6	65	18	16	2
40-44	76	12	11	1	77	10	12	-2	72	12	15	-3	59	21	19	2	70	14	15	-1
45-49	81	10	8	2	82	8	9	-1	75	8	15	-7	66	19	13	6	72	12	14	-2
50-54	85	8	5	3	84	6	8	-2	82	6	10	-4	72	14	13	1	77	11	11	0
55-59	88	7	4	3	86	5	7	-2	84	6	9	-3	72	17	9	8	76	10	12	-2
60 & more	90	4	4	0	89	4	5	-1	88	6	4	2	76	13	9	4	86	5	8	-3

Industry of employment and migration status

The uniformly greater migration from the three mountain subregions noted with regard to sex and age was not repeated when the relation of industry to migration was examined (tables 18 and 19). The exception to the previous relationships is particularly evident for those employed in mining (table 18). Washington and Oregon had the highest proportions of migrants among mining employees. This was even more pronounced in 1965-70 than in 1960-65. In California and Hawaii for 1960-65, the mining sector had the highest proprtion of employees who were migrants, followed closely by the service sector. For the Northern Mountain Subregion, contract construction had the greatest proportion of migrants. The industries with the most mobility in the Southern Mountain Subregion were manufacturing, trade, and finance-insurance-real estate. For the Central

Table 17. Age by migration status for subregions of the Western Region 1960-65 and 1965-70

Migration status	Age									
	21 or less	22-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60 & over
	Percentage									
1960-1965										
N.W. Pacific										
Res	0	2	9	10	11	13	13	13	11	13
In	0	4	18	18	16	13	9	8	5	4
Out	0	4	18	14	15	13	10	9	6	5
S.W. Pacific										
Res	0	3	9	11	13	14	13	12	10	10
In	0	7	18	16	16	12	10	7	5	4
Out	0	3	15	18	15	16	11	8	5	4
N. Mountain										
Res	0	3	7	10	11	13	13	14	12	12
In	0	4	18	16	14	14	10	8	7	4
Out	0	6	16	15	16	13	11	8	5	5
S. Mountain										
Res	0	4	10	11	12	14	14	12	9	10
In	0	5	16	17	13	13	13	8	7	5
Out	1	5	15	17	16	12	9	9	6	5
C. Mountain										
Res	0	4	10	11	12	13	13	11	10	11
In	0	7	16	16	16	12	12	7	5	5
Out	0	5	18	17	16	13	11	6	5	4
1965-1970										
N.W. Pacific										
Res	0	3	10	10	10	11	13	13	12	13
In	0	7	21	17	13	11	10	8	5	4
Out	0	4	21	18	14	13	10	7	4	4
S. W. Pacific										
Res	0	4	11	11	11	12	13	12	10	11
In	0	7	21	17	13	12	10	6	5	4
Out	0	4	16	17	15	14	11	9	6	5
N. Mountain										
Res	0	3	8	9	11	11	13	13	12	15
In	0	4	23	17	16	11	8	6	5	6
Out	0	7	20	19	14	10	11	7	6	3
S. Mountain										
Res	0	4	10	11	12	12	13	12	10	11
In	0	6	18	16	14	12	11	6	7	6
Out	0	6	19	15	13	14	10	8	5	5
C. Mountain										
Res	0	4	11	11	11	13	13	12	9	13
In	0	6	20	18	13	12	10	8	6	3
Out	0	6	16	19	12	12	11	8	6	5

Table 18. Migration status by industry for subregions of the Western Region 1960-1965 and 1965-1970

Industry	N.W. Pacific				S.W. Pacific				N. Mountain				S. Mountain				C. Mountain			
	Res	In	Out	Net in	Res	In	Out	Net in	Res	In	Out	Net in	Res	In	Out	Net in	Res	In	Out	Net in
	Percentage																			
1960-1965																				
Ag-For-Fish	79	10	10	0	84	12	2	10	55	11	33	-22	69	15	15	0	77	0	22	-22
Mining	61	12	25	-13	75	15	9	6	66	18	14	4	65	17	17	0	63	18	17	1
Cont const	76	13	10	3	79	11	8	3	51	22	25	-3	59	20	19	1	63	19	17	2
Manufacturing	81	10	8	2	79	13	6	7	69	12	18	-6	55	19	25	-6	68	18	13	5
Trans & Pub u	82	10	7	3	79	10	9	1	71	11	17	-6	67	16	16	0	74	14	11	3
Trade	80	10	9	1	78	13	7	6	69	13	16	-3	56	23	19	4	68	16	15	1
Fin-Ins-R e	78	10	11	-1	78	14	7	7	67	14	18	-4	55	28	15	13	66	14	18	-4
Service	79	10	9	1	76	14	8	6	72	12	15	-3	62	25	12	13	67	16	16	0
Government	88	6	5	1	85	9	5	4	82	5	11	-6	81	8	10	-2	80	8	10	-2
1965-1970																				
Ag-For-Fish	73	18	8	10	84	7	7	0	77	13	9	4	51	32	16	16	63	13	22	-9
Mining	52	25	22	3	70	10	18	-8	66	18	15	3	68	18	12	6	59	14	26	-12
Cont const	75	14	10	4	79	8	11	-3	56	19	23	-4	60	23	16	7	67	18	13	5
Manufacturing	75	13	10	3	75	10	14	-4	67	12	20	-8	50	21	27	-6	66	14	18	-4
Trans & Pub u	80	10	8	2	81	10	8	2	74	11	14	-3	62	19	18	1	73	12	13	-1
Trade	75	15	9	6	78	11	9	2	69	11	19	-8	55	25	19	6	69	16	14	2
Fin-Ins-R e	79	12	8	4	80	11	8	3	74	10	14	-4	62	21	15	6	68	18	12	6
Service	79	12	8	4	78	11	9	2	72	13	14	-1	66	22	11	11	67	16	15	1
Government	84	8	7	1	87	6	5	1	85	8	5	3	81	9	9	0	81	8	9	-1

Mountain Subregion, the industries with the most mobility were mining and contract construction.

The ordering of industries by relative mobility within regions for 1965-70 was similar to the earlier period. The increase in net out-migration noted for the South Pacific Subregion was largely confined to agriculture, mining, contract construction, and manufacturing. Proportionately, the other industries had less shift in migration flow, although the tendency was still present for these industries.

Wage level and migration status

The distribution of migrant status by wage level at the beginning of the period again exemplifies strong subregional variation (table 20). One of the more striking differences was in the proportion of residents by wage level. For the wage level $14,000-$16,000, there was a 36% difference between the Southwest Pacific and Central Mountain Subregions in the proportions of residents. In Colorado and Utah, 60% of the persons in this wage level were migrants, while only 23% were migrants in California and Hawaii.

Generally, the heaviest migration was by those with incomes of $10,000 or more. Such migration was particularly heavy in the three mountain subregions. This pattern was essentially the same in both periods.

The distribution of wage level by migrant status was about the same in all subregions (table 21). As was noted for the Western Region, migrants were slightly more likely to be at the lowest and highest income levels than residents.

Wage change and migration status

Wage changes were grouped into five categories:

1. a drop in wage income
2. an increase of up to $1,000
3. an increase of $1,000 to $3,000
4. an increase of $3,000 to $6,000
5. an increase of more than $6,000 (tables 22 and 23).

Again, there were striking subregional variations. Those persons receiving more than a $6,000 increase between 1960 and 1965 were more likely to be migrants in the Mountain Subregions than in the Pacific Subregions. Likewise, persons whose wage incomes fell were more likely to be migrants in the Mountain Subregions than in the Pacific. Perhaps the data simply reflected varied reasons for moving and these factors were more heterogeneous in the Mountain Subregions than in the Pacific Subregions.

The similarity between the two Pacific Subregions evident for 1960-65 did not reoccur in 1965-70. California and Hawaii were more similiar to the Mountain Subregions, with much migration at all wage-change levels.

Subregional differences in the distribution of wage change by migrant status were again much less pronounced. The most significant variation seemed to be between the periods of interest rather than among subregions.

Flows among Western subregions

Figures 1 through 4 summarize the total net covered worker flows among the five subregions. Total flow diagrams for 1960-65 (figure 1) and 1965-70 (figure 2) show

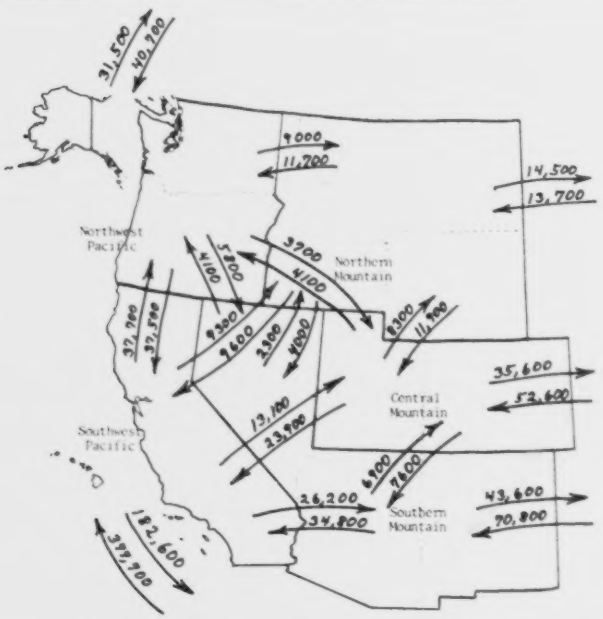
the magnitude of inter-subregion migration in absolute numbers. These data are particularly revealing when transformed into net gain figures (figures 3 and 4). Most noteworthy are the shifts in flow between 1960-65 and 1965-70; e.g., the earlier net gains by California and Hawaii become net losses in the second half of the decade. Also note the augmented net flows to Oregon, Washington, Alaska, Utah, and Colorado during 1965-70. The net out-migration of Idaho, Montana, and Wyoming diminished in the latter period, but did not reverse.

Table 19. Industry by migration status for subregions of the Western Region, 1960-1965 and 1965-1970

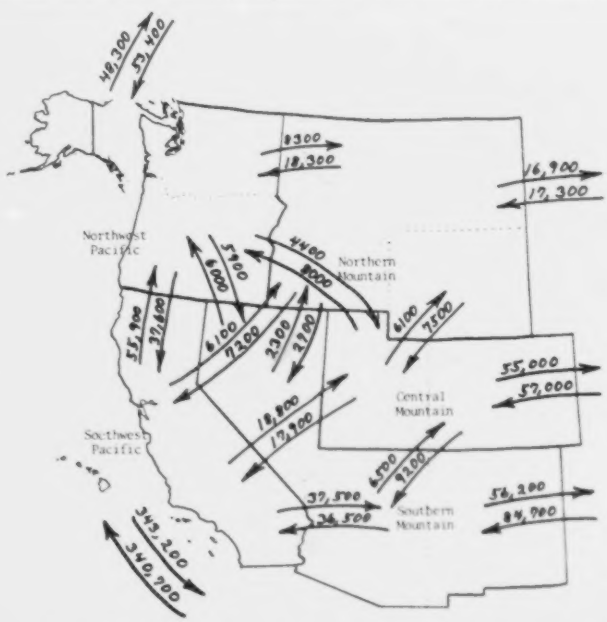
Migration status	Agr-For Fish	Mining	Contract const	Manuf	Trans & Pub util	Trade	Fin-Ins-Real est	Service	Government
1960-1965									
N.W. Pacific									
Res	0	0	7	26	8	22	4	21	7
In	0	0	10	26	8	22	4	22	4
Out	0	0	8	25	6	23	6	23	4
S.W. Pacific									
Res	0	0	7	32	8	23	5	17	3
In	0	1	6	33	6	24	6	19	2
Out	0	1	9	27	9	22	5	21	2
N. Mountain									
Res	0	5	6	16	8	25	4	24	8
In	0	7	15	15	6	24	5	21	3
Out	0	4	13	18	7	24	5	21	4
S. Mountain									
Res	0	0	11	13	8	20	4	28	7
In	0	4	11	12	5	24	7	32	2
Out	0	5	13	20	6	25	4	19	3
C. Mountain									
Res	0	4	7	22	8	26	5	18	5
In	0	4	9	25	7	26	5	18	2
Out	0	5	9	20	5	26	7	20	3
1965-1970									
N.W. Pacific									
Res	0	0	6	25	7	21	5	24	7
In	0	0	7	25	6	26	4	22	4
Out	0	0	7	29	6	22	4	22	5
S.W. Pacific									
Res	0	0	6	29	8	22	6	19	5
In	0	0	5	30	7	24	6	21	3
Out	0	1	6	41	6	19	4	17	2
N. Mountain									
Res	0	3	5	17	8	23	4	25	10
In	0	5	10	18	6	21	4	26	5
Out	0	3	10	23	6	27	4	21	2
S. Mountain									
Res	0	5	9	12	7	19	5	31	8
In	0	4	11	14	6	24	5	29	2
Out	0	3	9	24	7	24	5	19	3
C. Mountain									
Res	0	3	7	22	8	24	6	20	6
In	0	4	8	21	6	25	7	22	2
Out	0	7	6	26	7	22	5	20	3

Table 20. Migration status by wage level for subregions of the Western Region, 1960-1965 and 1965-1970

Wage Level	N.W. Pacific				S.W. Pacific				N. Mountain				S. Mountain				C. Mountain			
	Res	In	Out	Net in	Res	In	Out	Net in	Res	In	Out	Net in	Res	In	Out	Net in	Res	In	Out	Net in
1960-65	Percentage																			
Under 4000	77	12	10	2	74	15	10	5	69	14	16	-2	56	23	20	3	66	17	15	2
4000-6000	82	9	8	1	79	14	6	8	73	11	15	-4	63	20	15	5	71	15	12	3
6000-8000	84	9	6	3	83	11	5	6	71	11	17	-6	66	19	13	6	72	15	12	3
8000-10,000	81	9	8	1	82	11	6	5	64	14	21	-7	62	19	17	2	70	16	13	3
10,000-12,000	77	9	13	-4	82	11	6	5	56	20	23	-3	61	22	16	6	59	16	23	-7
12,000-14,000	72	11	15	-4	73	13	7	6	46	23	30	-7	58	24	16	8	52	19	28	-9
14,000-16,000	71	12	16	-4	76	16	7	9	47	33	19	14	50	29	29	0	40	26	33	-7
16,000-18,000	73	8	17	-9	77	14	8	6	85	14	0	14	48	30	20	10	57	19	23	-4
18,000 & over	67	14	18	-4	73	15	10	5	48	11	40	-29	59	22	17	5	59	18	22	-4
1965-70																				
Under 4000	74	14	11	3	74	12	12	0	71	14	14	0	59	25	15	10	67	17	15	2
4000-6000	77	13	8	5	77	11	10	1	75	10	14	-4	61	21	17	4	69	16	14	2
6000-8000	79	13	7	6	80	9	9	0	72	10	17	-7	63	20	16	4	70	14	14	0
8000-10,000	79	11	8	3	80	8	10	-2	74	12	12	0	67	17	15	2	73	12	13	-1
10,000-12,000	80	11	8	3	81	8	9	-1	63	15	21	-6	63	19	17	2	69	14	16	-2
12,000-14,000	79	11	9	2	79	9	11	-2	60	11	28	-17	55	27	17	10	68	13	17	-4
14,000-16,000	70	14	15	-1	78	10	11	-1	53	12	34	-22	54	27	18	9	55	20	24	-4
16,000-18,000	71	12	15	-3	75	11	13	-2	53	27	18	9	57	17	25	-8	49	19	30	-11
18,000 & over	65	17	17	0	72	13	14	-1	57	14	28	-14	56	22	20	2	58	19	22	-3



1. Gross flows of social security covered employees Western subregions, 1960-1965.



2. Gross flows of social security covered employees among Western subregions, 1960-1970.

II. INDIVIDUAL AND FAMILY CONSIDERATIONS IN WESTERN MIGRATION

Migration streams and the group characteristics of those flows show the changes in population composition that result from such movement. But they tell little about the decision-making process and the reasons why an individual and his family actually migrate. Decision-making involves a complex of social, economic and psychological factors which, in spite of considerable effort, we have only partially explored. One must not only be concerned with the varied motivations and conditions that determine location preferences, but also consider what combinations and relative strengths of these factors precipitate moves.

This section of the bulletin reports studies of location preferences and migration behavior of individuals. Location preferences of unrelated persons or family units are influ-

Table 21. Wage level by migration status for subregions of the Western Region 1960-1965 and 1965-1970

Migration status	Wage level, dollars								
	Under 4,000	4000-6000	6000-8000	8,000-10,000	10,000-12,000	12,000-14,000	14,000-16,000	16,000-18,000	18,000 & more
	Percentage								
1960-65									
N.W. Pacific									
Res	27	26	24	12	4	1	0	0	1
In	34	22	21	11	4	2	1	0	1
Out	33	22	17	11	6	3	1	0	2
S.W. Pacific									
Res	26	23	22	12	7	2	1	0	2
In	31	25	18	10	5	2	1	0	2
Out	38	21	15	10	5	3	1	1	3
N. Mountain									
Res	36	30	20	8	2	0	0	0	0
In	38	25	16	9	5	2	1	0	0
Out	35	24	18	10	4	2	0	0	2
S. Mountain									
Res	34	24	21	10	4	2	1	0	1
In	39	22	17	8	4	2	1	1	1
Out	43	21	15	10	4	2	1	0	1
C. Mountain									
Res	33	26	22	10	4	1	0	0	1
In	36	23	19	10	4	2	1	0	1
Out	35	21	17	9	7	3	1	0	2
1965-1970									
N.W. Pacific									
Res	19	16	19	18	12	5	2	1	2
In	23	17	19	15	10	4	3	1	4
Out	24	14	15	16	9	5	4	2	6
S.W. Pacific									
Res	18	15	19	16	11	7	4	2	4
In	23	17	17	13	8	6	4	2	6
Out	21	14	16	15	10	7	4	3	6
N. Mountain									
Res	26	20	20	16	7	3	1	1	1
In	30	15	17	16	9	3	2	2	1
Out	22	16	21	12	11	6	5	1	3
S. Mountain									
Res	23	19	18	15	9	3	3	1	3
In	28	18	16	11	8	6	4	1	3
Out	22	19	17	13	9	5	3	3	4
C. Mountain									
Res	24	17	18	17	9	5	2	1	2
In	28	18	16	12	8	4	3	2	3
Out	24	15	17	14	10	5	4	3	4

enced by a number of common factors that can also affect migration behavior. Analysis of location preferences examines the relevant values, perceptions and backgrounds of individuals that determine the expressed choices among destinations. Examination of actual migration in a causal framework probes further in attempting to explain why such movement takes place. While the W-118 studies at this micro-level were concerned mainly with social and economic factors in assessing the associated benefits and costs, the scope of the combined inquiries was relatively broad because of the multidisciplinary composition and background of the technical committee.

The analysis of location preferences grew out of the concern over population distribution that emerged in the early 1970s. The rural-to-urban movement that had been dominant since World War II was viewed less and less as an irreversible force. It became apparent that a significant number of households were willing to trade some of the

Table 22. Migration status by wage change for subregions of the Western Region, 1960-1965 and 1965-1970

Wage change	N.W. Pacific Res	In	Out	Net in	S.W. Pacific Res	In	Out	Net in	N. Mountain Res	In	Out	Net in	S. Mountain Res	In	Out	Net in	C. Mountain Res	In	Out	Net in
	Percentage																			
1960-1965																				
Decrease	76	12	11	1	76	13	9	4	66	16	16	0	58	22	19	3	67	18	14	4
Increase																				
up to 1000	88	6	5	1	84	9	5	4	81	7	10	-3	69	17	12	5	77	12	9	3
1000-3000	83	8	8	0	80	13	6	7	71	10	18	-8	63	20	15	5	70	15	14	1
3000-6000	73	14	11	3	74	17	7	10	52	21	26	-5	52	26	21	5	59	18	21	-3
over 6000	63	17	18	-1	69	20	9	11	39	21	39	-18	42	34	21	13	35	28	35	-7
1965-1970																				
Decrease	44	24	30	-6	75	10	13	-3	67	17	15	2	56	26	16	10	66	18	15	3
Increase																				
up to 1000	55	19	24	-5	81	8	9	-1	80	9	9	0	71	16	11	5	77	11	10	1
1000-3000	57	19	22	-3	82	8	9	-1	79	9	11	-2	68	18	12	6	73	13	12	1
3000-6000	44	28	26	2	77	11	10	1	63	12	23	-11	58	20	20	0	65	16	17	-1
over 6000	34	36	29	7	71	15	13	2	43	20	35	-15	47	28	24	4	51	20	27	-7

3. Net flows of social security covered employees among Western subregions, 1960-1965.

4. Net flows of social security covered employees among Western subregions, 1965-1970.

affluence of continuing economic growth in metropolitan regions for the quality of life amenities in less densely populated regions. The W-118 location preference studies (5, 6, 10, 22, 34, 64) tried to identify the relative strengths of the various preferences and the community attributes that gave rise to their formation.

A second kind of effort developed theoretical frameworks that placed human migration in perspective with changing opportunities for employment in rural areas. Stevens et al. (69) viewed migration as one adjustment mechanism used to cope with diminished employment opportunities in the declining wood products industry in Oregon. The concept of social marginalization was a central focus, wherein interactive processes between people and institutions occur in such a way that some groups become economically obsolete. The other study in this category (7) used

Table 23. Wage change by migration status for subregions of the Western Region 1960-1965 and 1965-1970

Migration status	Wage decrease	Wage increase: Up to 1,000	1,000-3,000	3,000-6,000	Over 6,000
1960-1965	Percentage				
N.W. Pacific					
Res	25	27	32	12	2
In	32	15	27	18	6
Out	32	14	27	17	7
S.W. Pacific					
Res	27	23	31	14	3
In	27	15	30	19	6
Out	27	15	24	15	5
N. Mountain					
Res	28	31	29	9	1
In	36	15	23	19	5
Out	28	16	29	18	6
S. Mountain					
Res	30	26	29	11	2
In	33	18	26	15	6
Out	36	17	25	15	4
C. Mountain					
Res	29	27	29	11	1
In	33	18	26	15	3
Out	28	16	28	19	7
1965-1970					
N.W. Pacific					
Res	19	14	34	22	9
In	20	9	22	27	19
Out	24	11	24	24	14
S.W. Pacific					
Res	19	13	31	25	11
In	20	9	22	27	19
Out	24	11	24	24	14
N. Mountain					
Res	20	19	37	18	4
In	29	12	23	20	12
Out	19	9	23	29	17
S. Mountain					
Res	19	16	32	22	9
In	25	10	25	22	15
Out	21	9	21	29	17
C. Mountain					
Res	19	17	33	21	8
In	24	11	25	22	14
Out	19	10	25	25	19

the utility concept of economics to posit migration behavior among farm families. Geographic location was one of several factors that interacted with other economic variables to provide satisfaction to the farm household.

The remaining W-118 studies addressing individual and family considerations in migration put more emphasis on ranking and measuring the relative importance of economic and social factors associated with migration. The studies by Anderson (1), Jones (40), and West and Price (74), analyzed the incidence of migration, reasons for moving, and associated benefits and costs of migration stated by members of their respective samples. Anderson and Gardner collected longitudinal data on a selected age cohort of Wyoming high school graduates over time. West and Price used an initial and one follow-up survey of recent Washington high school graduates, and Jones used data gathered from recent immigrants to a selected county in Nevada.

The other two empirical studies discussed posit a causal relationship between net immigration to counties and sets

of largely economic variables hypothesized to affect those net shifts. These studies relate to individual behavior in that levels of employment and income are taken into account. One study, by West (72), examined the effect of employment, income and regional factors on net immigration from 1960-70 to Washington counties. The other study, by Taqieddin and Gardner (70), analyzed the impact of federal employment on population distribution among multi-county regions in Utah.

Framework for Analysis

A conceptual framework broad and flexible enough to structure the common elements of the approaches taken by the multidisciplinary group of researchers cannot adhere rigidly to theory established within a single discipline. Attempts to form a broader framework suffer from lack of rigor and depth found in established theory. Nevertheless, we believe that such an attempt is justified on the basis of relating the studies to their common objective and identifying a central theme that they share.

It is suggested that people considering migration begin by identifying a set of forces believed to stimulate persons to improve their social and economic welfare through geographic mobility. The response to these forces is formulated in an environment where preferences and the surrounding economic and social environment interact to determine the individual's geographic mobility, or lack of it, given his personal characteristics. His perceptions of differences among geographic locations reveal his point of reference and the information available to him. His preferences tend to define what he views as optimal, although in some cases preferences may be subject to what is also viewed as possible. In the end, the individual's actual migration behavior identifies tradeoffs that occur while deciding if and when and where to move. His behavior, grouped with that of others, then determines the incidence of migration and the magnitude and direction of population shifts.

Within this broad framework, the location preference studies use a conceptual approach that embodies the goal of an "optimal" population distribution consistent with individual desires. The optimal distribution is one that maximizes quality-of-life attributes such as environmental and cultural amenities while minimizing negative outcomes such as congestion and inadequate public services. Not all desires can be met, so tradeoffs occur in which the strongest preferences are met at the cost of foregoing those given less weight. Migration is the short-run adjustment mechanism whereby individuals can choose among existing locations to find the one that most nearly accords with their weighted set of preferences. Persons who decide they would prefer to live somewhere else are identified as potential migrants.

The theoretical structure used in the analyses of actual migration behavior posits a number of causal realtionships among personal attributes of individuals, including migrant status, and the objectives they seek. The objectives are economic, social or cultural, and are consistent with those outlined in the preference studies. The set of personal attributes that influence goal attainment is relatively large. The set may not explicitly include location preferences, but age, sex, education, job experience, and other attributes are recognized.

The theoretical approach followed by the W-118 studies of migration behavior draw in varying degrees from the economic theory of human capital. The human capital approach recognizes the heterogeneity in background, abilities and desires of individuals and treats actions such as acquiring additional education or migrating as investments that increase one's economic or social welfare.

Stevens, et al. (69) used the human capital framework to a limited extent. They adopted the framework to their study of workers' response to declining employment opportunities in Oregon and extended it to incorporate both economic and noneconomic factors. This approach enabled them to posit different responses among individuals to similar economic circumstances. By expanding the scope of the variable set, they were more nearly able to represent the actual problem situation, including the alternative of migrating, faced by rural workers in the declining wood products industry. They hypothesized that depressed labor markets encourage outward geographical mobility while institutional lags caused by the educational system and intergeneration work patterns tend to retard mobility.

The human capital framework was followed more closely by Bond and Gardner (7) in their theoretical examination of factors affecting residence shifts of farm families. In their development, farm families attempt to maximize their satisfaction by making the location, social and economic adjustments over which they have some control. They do this by choosing a location that provides consumption goods, amenities, and allocation of time between farm and nonfarm work that gives them the most satisfaction.

Other variations corresponding in some degree to the human capital framework were used to structure the other empirical studies in this area. Jones (40) used an approach in which social, psychological and economic factors were posited as reasons why families choose to migrate. West and Price (74) focused more specifically on economic variables, and further tried to relate expectations to actual behavior. Anderson and Gardner, while recognizing the multifaceted nature of theories of migration, place some emphasis on the economic aspects that encourgae workers to migrate to where they receive the highest return for their effort (1:5-24,7).

In the final category of studies covered in this section, human capital concepts are embodied into frameworks that view population shifts as being influenced by regional economic attributes. Taqieddin and Gardner (70) and West (73) posited that net migration is affected by economic and location variables. The studies focused on net immigration to individual counties. Consequently, they inferred that these sets of migrants were homogeneous in their response to economic and location attributes.

Overall, we admit that the broad conceptual framework used to include the various theoretical structures followed in individual studies lacks the tight logic that is found in well established theories. Nevertheless, some elements common to problem-oriented studies of migration behavior are identifiable.

One such element is that migration occurs in response to

a set of determining factors: social, economic, or psychological. In turn, and without being inconsistent, migration can be viewed as an adjustment mechanism that enables individuals to improve social and economic welfare. Location preferences are based on these same objectives and when preferences differ radically from local conditions, migration is more likely to occur. The weighting of preferences and trade-offs among them can be seen in the studies of actual migration behavior.

Empirical Studies: Location Preferences

The W-118 empirical studies of location preferences used a common methodology developed earlier by Dillman and Dobash (21) for statewide mail surveys in Washington, Arizona and Indiana, respectively. Expressed preferences of respondents were tabulated and analyzed to learn their potential impact on population redistribution through migration. Specific questions addressed were: In what sizes of community or types of counties would respondents most and least like to live? What community attributes are desired and how are these related to community size? What is the extent of dissatisfaction by community size and how is this related to possible migration among locations with varying population densities?

The results from the preference studies are consistent in showing a dominant preference among those interviewed for small to medium-sized communities (table 24). In general, the most desired communities were bounded by an upper limit of cities with populations no larger than 150,000.

The Arizona (10, 11, 12) and Washington (23, 25) studies were also in general agreement that many residents in all sizes of community were reasonably satisfied with their current residence. Large cities were least often preferred and dissatisfied residents of these larger areas expressed a desire for places with smaller populations.

At the other end of the spectrum, the smallest villages and towns were viewed as desirable by many local residents, but were not preferred by a sizable proportion of people who lived elsewhere.

The preference studies leave the impression that where dissatisfaction with community size is strong enough to induce migration, a shift toward small to medium-sized cities will occur. However, dissatisfaction with community size

Table 24. Comparison between preferred community size and size of respondent's current location, Washington, Arizona, and Indiana residents, 1973

Size of preferred community	Size of present location: Large metroplitan	Small metropolitan	Small urban	Semi-rural and rural
	----------Percentage distribution-------			
WASHINGTON[1]				
Large metropolitan (> 150,000)	8.4[2]	2.4	2.5	1.8
Small metropolitan (50,000-150,000)	31.8	33.2	12.0	3.5
Small urban (10,000-49,999)	41.6	42.6	55.5	45.6
Semi-rural & rural (< 10,000)	18.2	21.8	30.0	49.1
	100.0	100.0	100.0	100.0
ARIZONA				
Large metropolitan	29.5	24.5	4.0	
Small metropolitan	30.0	37.7	12.3	
Small urban	22.4	22.0	31.0	
Semi-rural & rural	18.1	15.8	52.7	
	100.0	100.0	100.0	
INDIANA				
Large metropolitan	33.6	9.1	4.1	2.5
Small metropolitan	26.9	45.5	9.8	3.0
Small urban	18.1	29.9	58.6	11.5
Semi-rural & rural	21.5	15.6	27.6	83.0
	100.0[3]	100.0	100.0	100.0

[1]Plans in Washington refer to counties; those in Arizona and Indiana refer to communities.

[2]Respondents who prefer the same size of place as that where they currently live.

[3]Percentages may not sum to totals because of rounding.

Sources: Washington data (25: table 3); Arizona (12:11); Indiana (8:5).

appears to be a matter of degree. A sizable proportion of individuals and households are apparently content with their current residences.

Some further insight into what determines size preferenecs can be gained by examining the desirability of specific attributes of communities. Indiana study respondents wanted quality public schools and access to doctors and emergency medical care, regardless of the size of place in which they lived (table 25). The Arizona analysis found essentially the same type of preference among that state's residents, but job opportunities were also listed as desirable by a large proportion of those surveyed (10:15).

The attributes most desired by individuals could likely be found in all but possibly the smallest communities or low-income central city areas. This is not to say, however, that the smallest and largest communities do not have some attractive features. Indiana residents believed, for instance, that the smallest communities offered the highest quality of life while large communities offered availability of jobs, equality of opportunity for racial groups, and entertainment (64). On the other hand, the Washington results suggest that one's immediate surroundings, i.e., his dwelling and yard, might be major determinants of community satisfaction (23). Desired conditions such as a single-unit dwelling with a surrounding yard could likely be met in all but the most congested metropolitan areas.

Actual Migration Behavior

The examinations of "what happened" analyze the migration process after the migration. Many of the results provide the assurance of being based on actual events, but they also depend on respondents' recall for their accuracy. The in-depth study conducted by Anderson and Gardner (1, 7) used data from an age cohort of 132 living members of 1946 and 1947 graduating classes from a rural high school in Wyoming. This effort tested the hypothesis that migration from rural areas with declining populations is more common among young, well-educated, achievement-oriented people. The cohort approach was used to control for age, exposure to high school training, area of origin, and sociocultural background.

The results from this effort support relationships identified in many of the earlier migration works; i.e., more migrating is done by young persons who are achievement oriented and who want to invest in themselves through additional education. About half of the most recent moves of migrants were in response to exclusively economic incentives (table 26). Education was the strongest discriminating variable among migrants and nonmigrants. People in pro-

Table 25a. Tabulation of responses from Indiana residents showing desired community characteristics and perceived association with community size

Characteristics	Not desirable	Don't care	Desirable	Essential	No reply	Total
	Percentage of responses					
High quality medical care	0.3	1.5	35.0	61.3	1.9	100
High quality of schools	0.6	4.1	31.7	60.7	2.9	100
Availability of good jobs	1.7	6.3	42.6	48.8	1.5	100
Wide variety of stores	1.4	16.6	61.5	18.7	1.8	100
Voice in community affairs	1.7	20.2	64.1	11.4	2.5	100
Wide variety of outdoor recreation	4.6	34.2	49.7	8.0	3.4	100
Wide variety of entertainment	1.4	30.2	63.2	3.5	1.8	100
Near relatives	6.9	49.6	36.4	3.0	4.1	100
Presence of minority races	21.8	57.4	13.4	2.3	5.0	100

Table 25b. Tabulation of city sizes respondents think is best for each of the characteristics[1]

Characteristics	Small	Medium	Large	Very Large	No Reply	Total
	Percentage of responses					
Adequacy of medical care	12.2	39.4	27.7	16.4	4.2	100
Adequacy of public education	24.3	44.4	19.2	5.4	6.7	100
Lowest cost for food & services	28.5	34.0	18.9	9.9	8.7	100
Availability of good jobs	5.4	24.2	35.0	28.3	6.0	100
Lowest cost for public services	30.6	31.0	17.8	11.7	8.8	100
Place for raising children	53.6	32.5	7.8	1.5	4.6	100
Allowing residents a voice in deciding community affairs	63.3	23.9	4.9	2.0	5.7	100
Allowing individual freedom	51.4	21.8	8.2	11.4	7.3	100
Equality of opportunity to all racial groups	15.1	22.4	23.8	30.5	8.2	100
Outdoor recreation	30.2	35.4	18.7	10.2	5.6	100
General satisfaction	40.3	36.9	11.6	4.4	6.9	100
Entertainment	8.3	22.1	26.9	36.6	6.0	100

[1]Small means below 10,000 people; medium = 10,000-15,000; large = 50,000 to 150,000; very large means 150,000 or more people

Source: (8:6)

fessional and technical occupations were more likely to have migrated from a rural area and earnings of migrants exceeded those of nonmigrants. Among the total sample, five-sixths had migrated at least once. One-tenth of all moves were returns to the community where the high school was located.

In a somewhat different context, results from the study of migration patterns among recent graduates from nonmetropolitan high schools in Washington showed only a weak relationship between earnings and migrant status for males (table 27), although earnings were slightly higher for migrants. About two-fifths had migrated and lived in counties different from those where they had attended high schools. Among the migrants, well over half were employed in cities of more than 10,000 population; the majority of nonmigrants were employed in towns of less than 10,000 population or on farms or rural nonfarm locations. Slightly over half of the young women had migrated (74). About two-fifths of those who were employed were males in metropolitan areas.

The work on expectations of Washington migrants used a follow-up survey of the migrants in the original sample. Results, suitable only for a case study interpretation, indicate that expectations held before the move were fulfilled to a substantial degree by the moves (table 28). The majority of the respondents said getting jobs or more education was their main reason for moving.

The 1972 Oregon study by Young and Stevens (75) showed considerable labor mobility in and out of the wood products industry. Returns to labor were so low that outward mobility was expected. A range of economic, social and anthropological variables influenced mobility. Attitudes toward community, presence of dependent children, and job experience apparently affected employment decisions.

Diversity in the regional efforts was evident in the Nevada study (41). Here, gains and losses from migration were identified and effects of migration were classified as work-related, family-or personal-, and community-related. Work-related reasons influenced the largest proportion of migration decisions of families that had moved into Pershing County (table 29). Work-related reasons were identified as important by 55% of the husbands and 43% of the wives.

About one-third of the husbands experienced work-related gains (wages, opportunity to advance, more freedom) from the move, but less than one fourth of the wives did so (table 30). Husbands most often replied that they moved to get a job of interest to them. Family or personal gains from moving were cited more often by wives. Over two-fifths of the wives experienced family or personal benefits, while the proportion among husbands was about one-fourth. At a broader level, community-related gains accrued to 11% of the wives and 13% of the husbands.

In the Nevada study, only about 5% of both husbands and wives experienced work-related losses. Community-related losses were more prevalent; over one-third of the wives and one-sixth of the husbands reported this type of cost arising from their moves. In decisions involving community factors, it was evident that both husbands and wives were concerned over the health, welfare, and economic development characteristics of communities.

Table 26. Reasons for most recent move, by demographic and economic characteristics of migrants from Star Valley, Wyoming

Demographic and economic characteristics	Reasons for move: Economic only	Not just Economic	Total
ALL	38	39	77
EDUCATION			
Did not grad.from college	20	22	42
Graduated from college	18	17	35
Total	38	39	77
OCCUPATION			
Professional/technical	9	5	14
White collar	18	21	39
Blue collar	6	9	15
Farm owner	4	3	7
Total	37	38	75
INCOME			
Under $12,000	8	13	21
$12,000-17,999	7	12	19
$18,000-23,999	12	8	20
$24,000 & above	11	6	17
Total	38	39	77

Source: (1:49).

Regional Factors Influencing Migration

Relationships among characteristics of communities or regions and population change due to net migration are the central theme of the remaining two studies reported in this section. The study of net migration among counties in Washington from 1960-70 analyzed the effects of economic characteristics of regions on migration (72). The rate of net migration from 1960-70 into counties was directly related to the growth in employment in basic industries, particularly manufacturing (table 31).

A similar relationship existed between net migration and increases in median family income, although income had less effect than employment. The counties with higher net immigration were those dominated by higher education or government, or whose employment grew over the end of the decade, largely from an influx of food or lumber processing activities. Western Washington was more attractive than the more rural eastern Washington. The metropolitan area in western Washington attracted more inmigration than could be attributed to the greater growth in employment and income in that region.

Another study addressed similar questions in studying the effect of federal employment on population distribution in Utah (70). The Utah study looked specifically at the relationship between the distribution of federal employment and the distribution of total employment and population

across multicounty regions within the state (table 32). Federal employment and total employment were directly related. The ratio of federal to total employment was higher among the most populous and industrialized regions (70:10). Federal employment played an important role in distributing employment opportunities and population within Utah from 1960 to 1970.

III. SOCIAL CONSIDERATIONS IN WESTERN MIGRATION

This section is concerned with those consequences and causes of migration that are collective or institutional. When a community, state or other large population unit receives or is deprived of many of its people, that unit must adjust to the change. A considerable in-migration, for instance, may require new classrooms and teachers, new recreation facilities may be supportable that were not before, renewed local pride with being a "progressive" location may emerge, tensions between competitive political forces may intensify, and so forth. If an area is losing many people, certain local services may become more expensive per capita or even be lost. Real estate prices and other local investments may be devalued, and widespread loneliness or lethargy may occur as family and friendship ties are broken.

When many residents, including nonmigrants, are so affected by migration, we say these are collective consequences. Migration decisions and their direct consequences may begin as the concerns of separate individuals, but in time they can accumulate to become common consequences or causes affecting the whole population unit. This cumulative effect usually demands a collective reaction. In many cases, we see individual migration decisions adding up to a discernable trend that may stimulate further migration. For instance, when a number of high school graduates or influential community members independently decide to abandon their town for another, it may soon appear "the thing to do," setting in motion an out-migration spiral.

Several factors affect the way collective consequences of migration occur. The particularly important ones include:

1. the total number of people involved
2. such characteristics of the population unit as its size and preparation for population change
3. the timing of the migration: how fast it comes or goes, whether it comes on the heels of other changes
4. the selectivity occurring in the migration: whether those moving are largely young, minorities, or more educated.

Most population units have social organization—that is,

Table 27. Places of work and earnings of male graduates from Washington nonmetropolitan high schools by migrant status

Place of Work	Earnings						
	$0 - 2,999	$3,000-4,999	$5,000-6,999	$7,000-9,999	$10,000-14,999	≥$15,000	Total
	Percentage distribution						
MIGRANTS:							
Farm	11	3	0	3	7	0	4
Rural nonfarm	5	6	11	14	7	40	10
Small town (<2500)	21	6	6	8	7	0	8
Large town (2500-9999)	16	22	17	10	10	20	14
Small city (10000-49999)	5	9	28	27	33	0	22
Large city (>50000)	42	53	39	37	37	20	40
Total	100	100	100	100	100	100	100
No. of Obs.	19	32	37	59	30	5	181
NONMIGRANTS:							
Farm	18	6	17	1	8	0	9
Rural nonfarm	29	10	11	9	11	0	12
Small town (<2500)	12	14	19	17	13	20	16
Large town (2500-9999)	26	30	34	34	29	40	32
Small city (10000-49999)	9	24	11	28	29	40	21
Large city (>50000)	6	16	7	10	11	0	10
Total	100[1]	100	100	100	100	100	100
No. of Obs.	34	50	70	88	38	5	285

[1] Percentages may not sum to totals because of rounding.

Source: (74: unnumbered table).

Table 28. Reasons for migrating and degree to which expectations were fulfilled: Young adult graduates from nonmetropolitan high schools in Washington

Degree to which expectations fulfilled	Reason for migrating: Get job	Get more education	Get away from home	Increase income	Be with spouse
	Percentage distribution				
FEMALES:					
Fulfilled	69	60	14	-	50
Partially fulfilled	31	30	71	-	28
Little change	0	4	0	-	11
Disappointed with move	0	5	14	-	11
Extremely disappointed	0	1	0	-	11
Total	100[a]	100	100	-	100
No. of Obs.	13	82	7	0	18
MALES:					
Fulfilled	79	53	50	0	50
Partially fulfilled	7	42	25	33	0
Little change	0	3	0	33	0
Disappointed with move	14	0	0	0	0
Extremely disappointed	0	3	25	33	50
Total	100[1]	100	100	100	100
No. of Obs.	14	38	4	3	2

Chi-square: Females, $\chi^2 = 13.27$, not sig.; Males $\chi^2 = 44.94$, $p<.01$.

[1]Percentages may not sum to totals because of rounding.

Source: (74).

they also are a community, state, or region made up of commonly honored patterns of behaviors and beliefs. They are keyed to one another to such an extent that most people recognize them together as a whole system of social living. These interlaced patterns are called social institutions.

In an organized social system like a community, certain occurrences such as rapid population gain or loss may affect the normal operation of these social institutions, forcing them to change. These patterns are likely to be linked functionally with other community patterns. These other patterns must adjust, too, so that various behaviors and beliefs in the community can remain consistent and support one another. In this way, whole systems of social organization may change drastically after large in- or out-migrations. This process of social adjustment is often referred to as the "institutional" consequences of impact.

Obviously, there is not a great deal of difference between the collective and the institutional factors in migration. Taken together, they represent what is usually called the social dimensions as contrasted with the individual or family concerns discussed in Part II. Social causes of migration have their origins in what many people in a population unit do, and how many others react to what is happening. Social consequences are those affecting many or most in the population unit, even those who are not migrants. When enough migration flows to, from or through a social system for the term "social" causes or consequences

Table 29. Reasons migrants gave for moving to Pershing County, Nevada

Reason for moving	Number	Percent
HUSBANDS		
Community reason only	6	6.2
Community reason & family/personal	1	1.0
Family reasons only	13	13.4
Family & work-related reason	5	5.2
Work-related reason only	53	54.6
Not applicable (lived in county whole life)	14	14.4
No answer	5	5.2
Total	97	100.0
WIVES		
Community reason only	5	5.2
Community reason & family reason	2	2.1
Community & work-related reasons	5	5.2
Family reason only	24	24.7
Family & work-related reasons	3	3.1
Work-related reason only	42	43.4
Other combinations of all 3 reason types	2	2.1
Not applicable (lived in county whole life)	10	10.3
No answer	4	4.2
Total	97	100.3

to apply, the people's organized way of life is undergoing considerable revision.

The above implies that adjustment is usually a difficult and frustrating experience for most citizens, particularly those who are nonmigratory bystanders. In the long run they may benefit, but in the short run, certain social, economic and psychological costs must be paid by all. Because adjustment of the social system typically involves a multitude of uncertainties, is relatively slow, and requires revision of many social patterns, it is very difficult to plan for or manage effectively. This is so because changed social organization involves so many indirect causes and consequences that are extremely hard to envision. Yet the process depends primarily upon the understanding and willing cooperation of most of the lay citizens affected.

The social causes and consequences of a single migration flow can be expected to occur in any combination of these categories:

1. those social units sending the migrants
2. those units receiving the migrants
3. those transit units through which they pass
4. other units not directly involved, but that feel the indirect effects.

Social Causes of Migration

Although some research was more directly concerned with consequences of migration, while other researchers investigated its cause, these matters are often difficult to separate. In Part II, for instance, we noted that it is necessary to conceptualize the reasoning underlying individuals' migration decisions in order to determine whether migration has the expected consequences.

Several W-118 projects addressed the collective or institutional influence on migration. Some of these examined the effect of collective value changes now encouraging more migration for aesthetic and quality of life gains, as discussed in Part II (5, 6, 10, 11, 12, 23, 25, 34, 64). An-

Table 30. Gains migrants said they made by moving to Pershing County, Nevada

Types of gains identified	Number	Pct.
HUSBANDS		
Community gains only	6	6.2
Familial/personal gains only	15	15.5
Work-related gains only	28	28.9
Community & familial/personal gains	5	5.2
Community & work-related gains	2	2.1
Family and work-related gains	3	3.1
Other combinations	6	6.2
Nothing	7	7.2
Not applicable (lived in county whole life)	14	14.4
No answer	5	5.2
Don't know	6	6.2
Total	97	100.2
WIVES		
Community gains only	7	7.2
Famililial/personal gains only	30	30.9
Work-related gains only	12	12.4
Community & familial/personal gains	6	6.2
Community and work-related gains	3	3.1
Familial/personal & work related gains	7	7.2
Other combinations	10	10.3
Nothing	4	4.2
Not applicable (lived in county whole life)	10	10.3
No answer	4	4.2
Don't know	4	4.2
Total	97	100.2

Table 31. Regression Analysis of percent net migration, 1960-70, for Washington , regions and state

Region	Constant	Change in Agr-For-Fish Empl. (% of 1960)	Change in Manufact empl. (% of 1960)	Change in median family income (% of 1960)	Dummy Variable, educ. Govt. Counties = 1	Dummy variable, Counties w/recent Δ in Emp. = 1	Dummy variable Counties in west region = 1
Western Washington	46.96	-0.090	0.539**	-0.620	36.305**		
(n = 19)	(1.565)[1]	(4.32)	(2.668)	(1.271)	(3.802)		
			R^2 = .607 F = 5.416**				
Eastern Washington	-15.12	0.267**	0.057**	0.253	21.439**	-20.455**	
(n = 20)	(1.439)	(2.866)	(4.012)	(1.366)	(4.524)	(3.351)	
			R^2 = .751 F = 8.47**				
All Washington	-18.057*	0.239**	0.060**	0.290*	20.819**	-19.621**	12.710**
(n = 39)	(1.804)	(2.504)	(3.312)	(1.684)	(4.708)	(2.787)	(3.441)
			R^2 = .753 F = 16.278**				

[1] t-values are in parentheses.

* Significant at the 10% level. The coefficient for Y is significant at just over the 10% level. The t-value for the 10% level of significance for 32 degrees of freedom is 1.693.

** Significant at the 5% level.

Source: (72:116).

Table 32. Impact of federal employment on the distribution of total employment among Utah's multi-county regions during 1960-1970

Area	Total employment			Federal employment			Summary impact
	1960	1970	ΔT (60-70)	1960	1970	ΔT (60-70)	
1	22,470	23,800	1,330	797	925	128	Growth enhanced
2	60,130	78,840	18,710	16,770	24,139	7,369	Decline prevented
3	163,060	214,470	51,410	8,430	11,290	2,860	Growth enhanced
4	33,440	44,400	10,960	552	643	91	Growth enhanced
5	7,250	7,010	-240	439	507	68	Decline slowed
6	14,070	12,410	-1,660	262	405	143	Decline slowed
7	13,080	12,930	-150	395	453	58	Decline slowed
8	11,030	12,500	1,470	421	519	98	Growth enhanced
Total[1]	324,530	406,360	81,830	28,066	38,881	10,815	Growth enhanced

[1]Totals under Total Employment may not agree because of rounding.

Sources: Total and federal employment: Utah Dept. of Employment Security. Entire table: (70:17).

other project studied the "bandwagon effect" in accelerating migration to an attractive mountain community (43, 47). This rural location became increasingly appealing to nonresidents as it accommodated more persons with urban origins moving there, but became less attractive to established residents. The dwindling private landholdings encouraged many to move in while good property was affordable and available.

Another side of the social causes of migration matter concerns what is often termed the push factor. When economic or social conditions in a community become unacceptable to people, they thirst for another social environment. As the opportunity for a graceful exit occurs, these persons join the out-migrant ranks.

A Colorado study (48) suggests that an economic cushion or guaranteed employment elsewhere may be almost inconsequential in the "fleeing" process, as favorite times for leaving are often times of greatest personal economic uncertainty. The modal youth departure is within 1 year after high school graduation. Frequently, young adults leave in conjunction with separation or divorce or when terminated from a job. Older adults often leave when death or out-migration severs close family or friendship ties, or after a short time of struggling with a retirement that proves disillusioning in a community of life-long labor.

Social Consequences of Migration

The technical committee, after considerable discussion, elected to approach macro consequences of migration in terms of their social costs and benefits. The analytic advantages of this are considerable, but there are also serious problems of procedure and concept. The problems include:

1. lack of "common metric" or a system of quantitative units for comparing gains and losses of inherently different kinds
2. a time frame problem of making short-term and long-term consequences consistent
3. an uncertainty problem where unknowns such as societal fads and government policy changes reduce our ability to predict consequences
4. the indirect consequences problem: second- and third-order consequences and externalities have long-range significance in the adaptive affairs of social systems. These are exceedingly difficult to conceptualize because their causal ordering and origins are so complex and diffused.

Because the W-118 committee's work was framed in a comparative cost-benefit analysis form, these issues need to be examined in some depth.

At the root of confusion over implications of social benefit-cost studies is the fact that available approaches and methodologies presuppose that objective, deterministic relationships make impacts on the social system. However, the impacts also involve subjective feelings and voluntary responses of affected individuals. For instance, the same empirical occurrence—such as higher local wages, more diversified population composition, or more attractive streets and parks—may be judged either a social benefit or cost, depending upon people's perceptions and other personal and collective circumstances. Not only do different perceptions and circumstances make it hard for researchers and policy formulaters to judge whether impacts should be considered benefits or costs, but it is often even harder for the affected citizens to decide.

When we add the dimension of time, assessment of impacts is made even harder. What may be thought of as a cost in the short run, such as a more urban flavor to local life, may be judged a benefit in the longer run. The more able, ambitious youth of the area may be less inclined to leave, thereby strengthening local leadership and community adjustment potentials in the future. What differs here is whether we take the short-run personal consequences or long-run collective consequences of migration to be more important. Obviously, both are important, making systematic assessment and policy interpretation a messy task at best.

A key element of the dilemma is the "from whose perspective?" question. Minimizing costs of services for an expanding population benefits those established residents who prefer the status quo. But this approach may penalize newcomers, retard growth and jeopardize future generations' interests. Secondary effects are also present. Promotion or retardation of growth in smaller communities af-

fects central cities or other origin areas of potential immigrants. Acceptance of what may be severe social costs in the short run by receiving communities could provide long-run social benefits. Balancing off local, regional and national interests over time is obviously a difficult pragmatic matter precisely because it is a complex and often unresolved conceptual matter.

One further matter deserves consideration when reviewing the implications of cost-benefit conceptual problems. Implicit in the concept is a cost-efficiency assumption that bothers many social scientists: in some cases, it may not be appropriate to assume the "best" policy avenue is the one that yields the greatest benefit for the least cost, particularly when costs and benefits are measured in dollars. The questions of time-frame and for or by whom are relevant, of course, but the problem goes beyond that. Intangible humanistic and environmental concerns are at the center of the matter.

Summarizing the dilemma are questions like "is a cost-efficient approach preferable to a total-effectiveness approach when dealing with such things as the racial/ethnic integration of a divided society, the social and emotional consequences of under-employment, or the sacrificing of aesthetic pleasure or ecological integrity?" Such questions simply do not have easy objective answers. The point is that one must remain sensitive to the possibility that the cost-efficiency implication of cost-benefit analysis may be inappropriate in given cases. We must remember that conclusions resulting from such analysis are usually of value, but are not a trustworthy global criterion for policy actions.

Table 33 is a very simplified summary of these social cost-benefit themes.

Economic Costs and Benefits to Local Areas

Research in Idaho comprises the main W-118 work on the local community economic impacts of migration. Hamilton and Reid (37) made an empirical analysis of the relationships among local government expenses, population levels, and net migration. Using data from the 1967 Census of Governments and from the Census of Population, they found that per capita costs of public services rise as the population base diminishes (figure 5). Extension of the analysis to 11 states in the Western Region showed essentially the same relationships prevailing in the other states except for some variations, probably statistical, for Arizona and Utah.

Overall, the results imply that population loss in small communities brings higher service costs to remaining residents. The study leaves unanswered a question of more current relevance: what is the impact of in-migration, which many of these communities have experienced in recent years, on the costs of public services? Further study is needed to discover whether moderate population growth can be accommodated by the unused capacity of the local service structure, or whether increased service aspirations and front-end loading caused by the new residents actually overshadow any economies of size benefits.

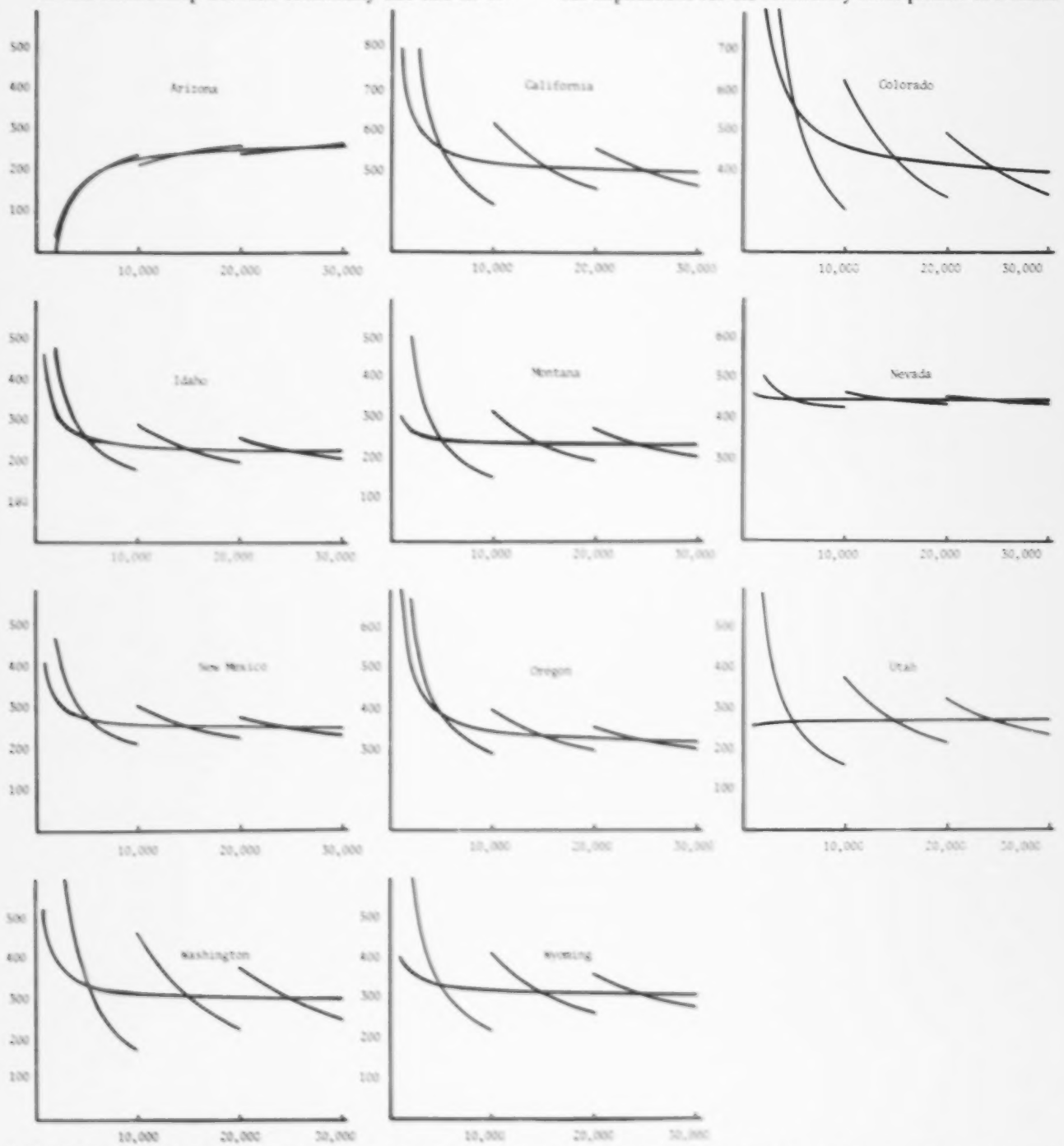
Hamilton, Peterson, and Reid (38, 63) examined the relationship between the size and growth rates of Idaho towns and the range of commercial and public goods and services they offered. Using Guttman Scaling techniques to process data from Dunn and Bradstreet credit reports on services available in Idaho towns, the researchers calculated population thresholds at which a town was deemed able to

Table 33. Key social costs and benefits of community growth and decline

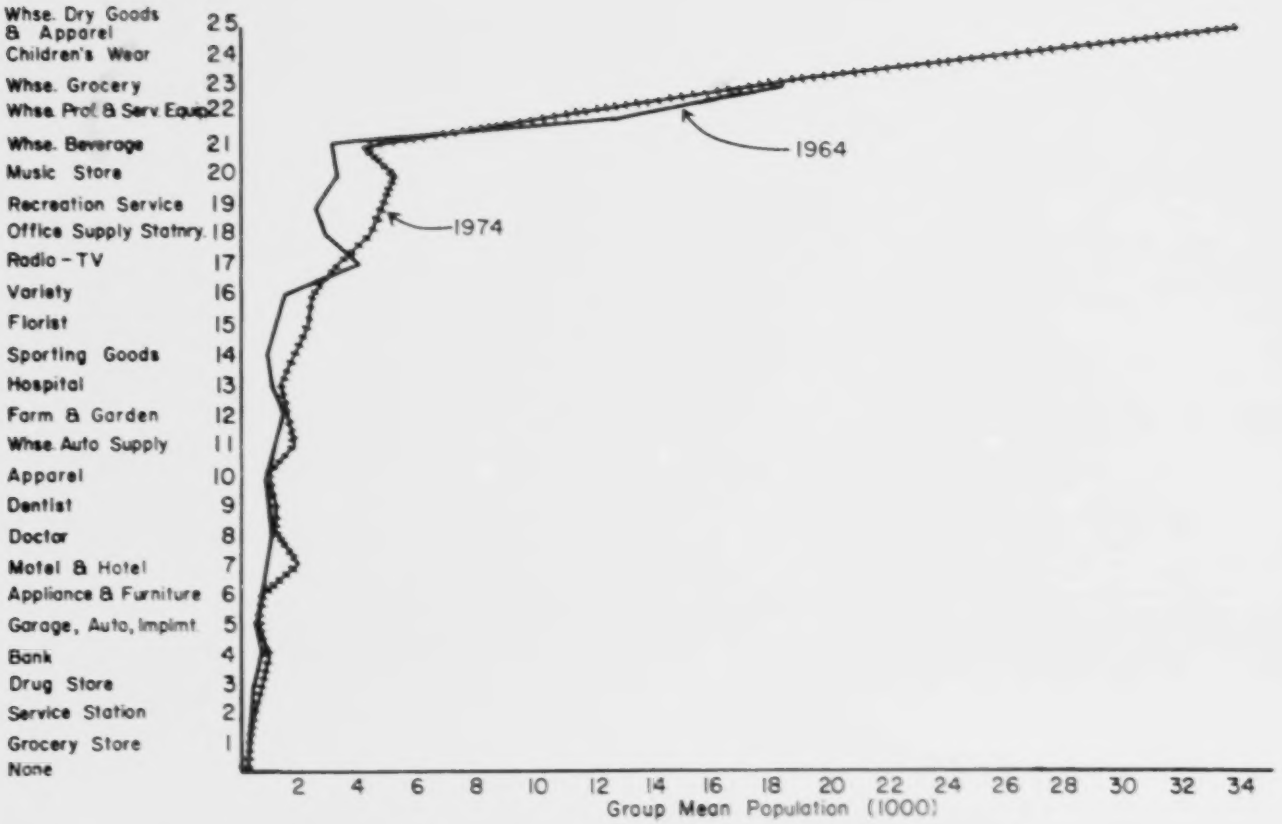
Kind of change:	Costs:	Benefits:
Substantial growth	Economic: Expenses of new service infrastructure construction, financing and operation; transaction costs; demand-induced local inflation;	Economic: Improved economies of scale, including new or improved services; increased employment opportunities, and cash flow;
	Noneconomic: Pains of having to adjust in a less-certain milieu; erosion of trusted, comfortable established patterns, including those facilitating social control, resulting in anxiety, indecisiveness or ineffectiveness; harm to environment;	Noneconomic: Sense of common crisis stimulates civic concern, reactive planning and grass roots action, with more frequent and intense interaction supporting increased affective pleasure; increases linkages and local correspondence with societal organization or patterns, enhancing long-run community viability;
Substantial decline	Economic: Loss of or reduced efficiency of services or facilities; foregone fiscal options; proportionally increased public finance loads; deflation of local investment values;	Economic: Selective cost of living reductions (e.g., cheaper housing, cheaper rent on business property);
	Noneconomic: Defensive reinforcement or conservatism that interferes with community development or adaptation potentials; diminished heterogeneity, a source of innovative conceptions and social options; sense of estrangement as social ties are severed or weakened and local interaction slows down; pessimism.	Noneconomic: More peaceful, orderly milieu; more homogeneous residual population makes for more comfortable relations with others and greater social predictability; reduced use pressure on common facilities and land.

provide a given component of goods and services (figure 6). These thresholds form a continuum; basic services such as a service station or grocery store could be supported by towns of 100 or fewer people and higher order services such as wholesaling required populations nearer to 10,000 to 20,000.

If this relationship between community size and its offering of goods and services remains stable as population changes, and the study does present some evidence of this stability, then the relationship is useful in predicting the effects of population changes through migration. The shift of the population thresholds toward requiring more people to support a given service level that is evident in figure 6 has implications for the community consequences of a stable



5. Scale effect and migration effect curves for 11 Western States. For each graph, the horizontal axis represents population, and the vertical axis represents per capita expenditures in dollars.



6. Mean population of towns at each service threshold, 1964 and 1974.

population. It would be desirable to replicate these studies in other Western states to judge the generality of the Hamilton, Peterson, and Reid results.

Local institutional adjustments to migration

Several commitee members' work examined the community service, public participation and common sentiment dimensions of communities adjusting to population changes. Carpenter (11) considered what would happen in Arizona if most people tried to realize their preferences for living in middle-sized towns or on the fringe of metropolitan communities. His conclusion: if it were possible for such to occur, the consequences for these communities or hinterland areas would be an almost-catastrophic need for institutional adjustment. But such is not really possible, for if all who preferred such residence were to move there, they would no longer be medium-sized or fringe areas.

The field research of Knop and colleagues (44, 46, 47, 48, 52) illustrates a blending of emphasis on economic and noneconomic impacts of migration at the community level. A portion of this research involved case studies of three smaller, rather remote Colorado communities. One lost population dramatically between 1950 and 1970, one gained dramatically over the same period, and one remained remarkably constant during those years. Data from questionnaires, documents, interviews and observations prompted Knop's general conclusions, which follow.

In the growing community, those added institutions tended to be specialized services, organizations and activities that appeal only to a limited portion of the total population such as specialized apparel shops, bookstores, backpacking clubs, and cultural events. In the declining community, however, surprisingly few services and social organizations were lost during the three decades of decline, although most that remained were marginal operations. (Note the comparison with the Hamilton, Peterson, and Reid conclusions.) Services that were relinquished were usually "duplicate services," such as the third dentist or the weaker community service club.

There was little evidence of consolidation of duplicate services; the alternatives were simply given up, reducing the range of choice. There is evidence that the retention of a full complement of services in declining communities has both driven up their cost and forced people to settle for less adequate services. Obviously, this can only go on for so long before it is not feasible for residents to use local services regularly, thereby causing the community to lose these service institutions. Implicitly, some will have to do without services they have come to expect and know that urban residents enjoy; some will have to pay more in money, effort and travel time for these services; and some will leave for more populated areas.

Community satisfaction and perceived problems data from the declining community indicate that the older and poorer residents are concerned about doing without, the

middle-aged and richer are concerned with paying more, and the young anticipate leaving, depriving the community of their much-needed involvement.

Much of Knop's emphasis is on the effects of social participation and community satisfaction during migration-induced community adjustment. He comments: "A factor closely associated with growth-decline patterns is the 'social vigor' characterizing the community. Such, of course, is probably as much a cause of growth or decline as a consequence. Consistent with others' observations, we have determined that the growing community is socially, politically, culturally, and economically the most vigorous of the three. It generally is considered a more pleasing place to live, is characterized by more social activity, more excitement, and a substantially higher level of community satisfaction" (48).

Specifically, the rate of population growth appears directly related to how active an interest the average citizen takes in community affairs, and how hard he works to promote the community's well-being. The growing town is more democratic in the sense that a much larger proportion of population participates in decision-making. For this reason, the growing town has been very adaptive. The declining town's decision-making is dominated by a local oligarchy of businessmen and professionals, and is highly traditional and socially static. Conditions in the stable community are between these two extremes.

Related to this is the unexpected finding that in growing communities, the satisfaction residents have with the community is directly related to the number of problems they think exist within it. The growing community had both high average satisfaction and very many perceived problems. The declining community had low average satisfaction and very few perceived problems. Again, the stable community was intermediate in both regards.

Two factors perhaps explain these results. First, some residents are more satisfied because they feel they can deal effectively with the problems they face, and actively seek problems. Second, the rewarding social interaction that accompanies citizen problem-solving efforts increases the sense of community and thus the satisfaction people have with it. In contrast, the citizens of declining towns who are less satisfied with their community probably ignore problems they face collectively because they either feel powerless to deal effectively with them or they find the necessary effort to be socially unrewarding. Thus the community declines both in population and in the more important social sense, thereby feeding further apathy and decline.

A final observation for Knop's data on the three communities is noteworthy. In his sample of towns, there was no clear relationship between either the availability of jobs locally or the average pay for these jobs and the satisfaction people felt with the community or their inclination to remain in the town. Such was particularly apparent in data collected from high school students. Apparently, the quality of social life in the community was more significant to residents than were employment opportunities and pay. In the Colorado communities, the often-heard comments about insufficient job opportunities being a major reason for outmigration may be more fallacy than fact.

Another of Knop's field projects involved re-examination of the energy boom town experience of Rock Springs, Wyoming. Focusing on the dynamics and consequences of a high level of local initiative and grass roots guidance in impact accommodation, he concluded that:

1. the town got substantial indirect social benefits not noted in others' literature on this case (although it did clearly experience severe economic challenges);
2. the coping strategies and tactics used by the community were highly successful.

This town's actions may provide a model for other communities facing a similar boom experience (52).

IV. POLICY IMPLICATIONS

Introduction

The committee agreed that this report would discuss policy implications of the research, but not develop specific policy recommendations.

Substantive mechanisms that can be used to influence migration include:

1. incentive and inducements (e.g. gift land, bonuses, subsidies)
2. regulation (quotas, zoning)
3. information dissemination (publicizing the availability of opportunities, providing guidance regarding what to consider and how to weigh factors when deciding on a move)
4. expenditures and siting decisions (establishing government facilities, ensuring replacement use of terminated installations)
5. enabling actions (relaxing movement prohibitions, establishing transit routes, ensuring order in a receiving area, and no reprisals in a sending area)
6. coordination and organization (clearing house activities, merging political/administrative units, integrating affected units for coordinated responses and many others too numerous to list).

Policy Implications of Contributing Projects

Residential preference

One might prematurely conclude that the implications of residential preference research would call for federal government actions to ensure:

1. that there are enough appropriately located medium-sized communities that have the employment, service and social opportunities potential migrants want
2. that people be provided information about life in such places, and perhaps even an opportunity for easy experimental migration to them, so doubt could be removed and poor decisions rectified.
3. that the personal costs and uncertainties of migration be diminished so that even marginal gains could be a worthwhile basis for movement
4. that, by formal enabling action or informal legitimization through public opinion, all stages in a life

cycle could be made nearly equally suitable for a desired move.

With more careful analysis, however, we realize that such possible implications are premature because we have not considered them in the context of "macro" public welfare issues. Is it in the best interests of all, now or in the long run, that such personal preferences be realized immediately, effortlessly and without risk? For various reasons, we must answer: presumably not. Is it the federal government's responsibility to fully promote and coordinate migration that occurs primarily for individuals' gains? Again, presumably not.

The historic precedents of our national society involve a laissez faire opportunity structure with potential individual benefits. These benefits are appealing enough that individuals are willing to assume various known and unknown costs and risks for their own benefit, and in many cases, for that of the nation as a whole. In this national welfare dimension, we assume our government's functioning is legitimate only when its actions are adequately justified in terms of the common good—doing for the benefit of all, or most, those constraining, enabling and coordinative tasks that cannot be done privately or by a lower level of government. We assume such because at the collective level that is our precedent, now institutionalized in the social structure; and at the individual level, to do otherwise would mean a collective usurping of our autonomy to privately pursue what we value. Obviously, a balance must be maintained between these collective and personal prerogatives, so that a shared conception of the greatest general good (for both individuals and the national collectivity) can be realized.

With this approach, we ask: what are reasonable, prudent policy implications of the residential preference findings? First, one can note that the opportunity for migration as a personal means of finding more desirable circumstances is consistent with precedent, and generally, in the national interest. Thus, the right must be preserved. But reasonable personal costs and uncertainties of migration are also part of our tradition, and in our national interest.

For instance, imposing a financial or other burden on everyone so that those preferring medium size communities could move there without personal cost or risk would have negative public consequences. It would likely violate our sense of social and economic justice, and possibly cost the government legitimacy or defeat on more critical issues. It would reduce diversity in community size, an option we have come to expect in a heterogeneous society. It would severely impact our limited number of more desirable medium-sized local areas or communities, costing those already there, as well as the newcomers, much that is desirable about them. It would leave less desirable community locations with surplus facilities and higher per capita maintenance costs. It could result in greater imbalance in regional population distribution and dilute distinct regional subcultures valued by those who participate in them.

Thus, residential preference findings imply that the most appropriate migration policy would be multifaceted and coordinated among the national, regional or state, and local communities. The policy could involve simultaneous actions to:

1. improve satisfaction with present residence areas
2. facilitate individuals' accurate, rational assessments of migration costs and benefits in terms of their own value structure
3. assist, through direct and indirect means, the adjustment of communities that have become victims of unmanageable population gains or losses.

We must conclude that those who set policy should have a well informed conception of how much and which kinds of migration are in society's interest in the longer run before specific, nationally-applied migration policies are imposed. There is little evidence that such developed and commonly accepted conceptions exist. This situation has several implications.

First, research and national dialogue on migration preferences, prerogatives and problems must continue, presumably at an even higher rate, if we are to obtain needed insights and avoid undesired repercussions of future migration patterns. Second, present migration-relevant policy is best left to specific national needs or area problems rather than universal in orientation and application. Third, strategies should be oriented to and consistent with community consensus, with national-level policy being primarily coordinative and facilitating. Fourth, migration policy should generally involve "softer" operational strategies such as incentives, persuasive information and enabling actions, etc. And fifth, policy actions should be implemented in a cautious, pilot program fashion, with adequate monitoring and analysis of consequences so they can be adjusted as necessary and yield greater insights for further application.

This expanded discussion of policy-related analysis of residential preference results is not intended to be an authoritarian statement, but rather a demonstration of the thought processes that led to the policy implications presented. These interpretations, of course, were influenced by the disciplinary backgrounds and value judgments of the authors.

General migration patterns

Because the West experienced relatively more migration than the rest of the nation, it is expected that the unsettling personal and social effects of this movement would be particularly strong in the region, likely demanding special official and lay sensitivity to its consequences. The pattern of intra-regional migration within the West is diverse and appears to be changing, but the degree, permanency, or even direction are not clear. This evidence only underscores the prudence of the policy strategy suggested in the previous section. Vigilance is crucial in monitoring, coordinative and adaptive activities within affected areas, and state and national support should be considered for those areas developing the most serious problems.

Because specific cases will vary in many ways, a flexible, particularistic policy approach seems most appropriate. And because the unsettling effects of migration on both persons and communities are ameliorated through interaction at the local level, emphasis on facilitating grass-roots perceptiveness, rationality, and adaptive initiative seems an essential

part of the migration policy. Such might be approached as the generic community development activities have been structured. At the grass-roots level, catalytic or facilitating personnel could be provided with materials, training and support acquired through interaction with those higher in the structure. At the intermediate and upper levels, specialized technical support from state, regional, or national agencies may facilitate the processes working at lower levels.

Individual and family costs and benefits

Policy implications include the following: First, actions that facilitate economic and quality of life improvement in push areas seems called for. This would obviate some migration that could make problems for all concerned. Action aimed at encouraging and assisting personal initiative in quest of available benefits wherever one happens to be seems appropriate. Such action may make some moves unnecessary and others more satisfying if undertaken.

Second, actions that encourage and support informed, rational and prepared migration are in order. This support would presumably diminish the number of ill-advised moves, more adequately orient migrants to the opportunities and problems awaiting them, promote advanced preparation for a smoother relocation, and sensitize migrants to adjustment into the receiving community. Migrants should realize the importance of maintaining ties with the sending community during the transition period, as well as the opportunities the move provides for experimenting with previously-contemplated personal changes. All this should enhance satisfaction with a migration decision.

Third, actions are appropriate that help recipient communities understand the importance of opening social participation to newcomers and tolerantly accept that facility and service adjustments are needed for everyone's mutual benefit.

Social costs and benefits

Several policy implications of social cost-benefit research were inferred.

First, actions that encourage and facilitate local broad-based monitoring and democratic decision-making will aid adaptive processes required by the gain or loss of population.

Second, special attention and consideration should be offered to those places facing more large gains or losses, and direct assistance should be provided when local resources are inadequate to cope with the impacts. Such assistance could come in two ways: through funds automatically available to an impacted community, and from special funds that can be obtained only by special community initiative.

The various tax systems vary in the degree to which they automatically provide funds to migration-impacted areas. The property tax is notoriously unresponsive in the short run to population change; local income taxes, and natural resource severence taxes are substantially more responsive. Local taxes that would provide funds in the face of population loss would be harder to devise, and probably make problems worse. The important point is that states and local areas can take some action to make their automatic fiscal structures more responsive to many of the problems caused by migration in the West.

However, automatic fiscal structures cannot deal with all impacts of migration on a community. Such devices rarely deal with the problem of out-migration. Taxes also are deficient when speed of reaction is crucial. A severely impacted town may have "front-end loading" problems—a need to build a school before the new factory starts paying taxes—or to build a sewage system big enough to handle the growth it knows is coming over the next 3 years. Direct assistance should be provided, at local request, when problems surpass local resources needed to solve them. The initiative should remain with the local people, however. The social benefit is unquestionably greatest when grass roots adaptive processes work to their full extent, yielding tangible accomplishments local populations can take greater pride in. Such activity can also be a good precedent and learning experience that should serve a community well in the future.

More specific actions in support of these themes might include, at the lower level, vigorous community development activities that emphasize local initiative and guidance; and supply instruction materials, experienced technical personnel and specific research service to aid the process. In specific situations, administrative standards imposed from a higher level that cause problems should be waived. Interaction among citizens in areas facing problems should be encouraged and subsidized.

Federal and state governments might make available emergency funds that local areas can apply for without critical delay or frustrating paperwork. Federal or state agencies could assume some responsibility in obtaining replacement industry for localities that have lost key employers and promote coordination among agencies serving area maintenance needs. At a more general level, relevant national goals could be made generally known, so that local, state and regional planning efforts could take these into account, and so that direct federal actions (facility sitings, enactments, etc.) would follow a more consistent and persistent rationale. Still further, basic research and experimental programs could be pursued so that the various impacts of migration would be better understood and when necessary, mitigated.

Concluding Comments on Needed Research

For many years now, the West has experienced significant migration trends and their consequences. These have sometimes served as indicators of what other regions can expect. It is particularly important, then, that such trends and effects be monitored, analyzed, and bad ones ameliorated promptly. One can make the case that the West is the nation's migration "natural laboratory," demanding special scrutiny of the region's on-going experience.

It is the Committee's feeling after 5 years of migration investigation in the West that certain matters deserve high research priority. They include:

1. the apparent new trend of urban-to-rural flows
2. the apparent increase of quality-of-life/amenity oriented migration in the region
3. the relationship between personal preferences for location and the migration patterns it precipitates

4. **the effects of previous and present migration-relevant policies**
5. **the difficult matter of social cost-benefit analysis of migration in general, especially regarding indirect consequences.**

Further serious attention to these matters and their consequences and implications should move us closer to an enlightened national approach to migration matters. Migration problems are among the most significant and ill-understood portions of our past, present, and future.

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